



THE CULTIVATOR.

FORBES. VAN HANKEEN. N. Y.

THIRD

To Improve the Soil and the Mind.

SERIES

VOL. V.

ALBANY, NOVEMBER, 1857.

No. XI.

To our Agents and Friends—Old and New.

We ask your attention once more, as the year nears its close, to the old subject of effort in the cause of Agricultural Progress. How all other interests hinge upon this of tilling the soil, and how universal a benefit is conferred by rendering the Farmers' labors more productive, we do not now need to remind any man. And every observer of our Agriculture, during the last quarter of a century, must ascribe much of its evident advancement to its Literature, which, in that period, has constantly become more and more an established institution. There are still, however, few if any localities in which the diffusion of reliable Agricultural reading would not bring about improvements; and one placed in a position to see what some farmers can do and are doing, to enrich themselves and the country, is astonished indeed to find so large a majority yet persisting in old ways, exhausting their soils and wasting the resources so bountifully afforded them by Nature! The best farmers are always the best readers; and through their aid we seek to reach others. We lay before you our Prospectuses for another year, renewing our acknowledgments for past assistance, and trusting that the character of our Journals has proved worthy of their cause, and of your further services in promoting the extended appreciation of both.

Every year we receive apologies for small lists of subscribers, because the ground had been pre-occupied by other newspapers, miscellaneous journals, &c. We are anxious on this account, to induce our Agents to take the field earlier than usual; and to facilitate their operations, make the following proposition, while we also offer a LIST OF PRIZES to be decided January 1st, 1858, in addition to those open as usual for competition until spring.

Proposition for Immediate Exertions.

We have just issued the ANNUAL REGISTER OF RURAL AFFAIRS for 1858, some months earlier than ever before. As will be seen by our Prospectuses, we shall send it as our customary NEW-YEAR'S PRESENT TO MEMBERS OF CLUBS, for either THE COUNTRY GENTLEMAN or THE CULTIVATOR, at the prices there named. Now if our Agents will immediately go to work, and send us the names as fast as they get them, for the

papers for 1858, they need only remit each time the postage, (two cents per copy,) which we shall be obliged to prepay on the REGISTER. When the list is made as large as possible, a draft can then be sent us for the whole amount at once, just in time to reach us before January 1st, when the Premiums are to be decided. The results effected will be, that the Agent can take advantage of every occasion that presents itself for the next three months, to obtain subscribers; that the subscriber immediately receives his REGISTER, as an earnest of the subscription itself; that the Agent, if he chooses, need not require payment, (more than for the postage,) until he has the REGISTER to deliver, and that now, while the means of intercourse are easy, and the ground still uncanvassed by a hundred others, he can work with much less trouble, and far more satisfactory results.

If our friends see the force of these views, we shall feel under renewed obligations to them if they will "act accordingly." Specimen Numbers of our Journals, Prospectuses, and a copy of the REGISTER for 1858, for use in canvassing for subscriptions, will be sent on application. We have already sent out copies of the REGISTER to our Agents; if any have been omitted, will they please inform us?

We need not add that we hope for a largely increased subscription list for 1858. We shall continue to make every effort, and to spare no expense, to maintain the reputation of our Journals, both Weekly and Monthly, as the Best of their Class and Price in the country. You can do much to assist us by exerting your influence in their favor, and by devoting an hour now and then during the coming winter, to place the subject fairly before the community in which you live.

ASSISTANTS AND SUBSTITUTES.

If you will ask each subscriber, on receipt of his Register, to show it to three or four neighbors, and hand their names over to you if it pleases them, you can make every additional one an Assistant in enlarging the List. And if circumstances prevent your taking a prominent part personally in obtaining subscriptions, may we not depend upon your PLACING THE MAT-

TER IN THE HANDS OF SOME ONE who will take an interest in it, and who will make an EFFICIENT AND RELIABLE AGENT.

JANUARY PREMIUMS.

We propose to award the following CASH PRIZES for the largest amounts of cash subscriptions to our Journals we receive up to January 1st. Our object has been to make the number of Premiums as large as possible, that ALL may take an interest in competing. We shall hereafter offer another List at least of equal extent open for competition up to April 10th. This will make the aggregate amount larger, and the sums severally more liberal than we have ever before offered.

1. For the largest amount of cash subscriptions to our Journals, at the lowest Club Rates of 52 cents per copy for CULTIVATOR and REGISTER, and \$1.65 per copy for THE COUNTRY GENTLEMAN and REGISTER, received at this office, January 1st, or previously, we will pay,..... TWENTY-FIVE DOLLARS.
2. For the TWO next largest amounts, each, TWENTY DOLLARS.
3. For the THREE next largest amounts, each, FIFTEEN DOLLARS.
4. For the FOUR next largest amounts, each, TEN DOLLARS.
5. For the FIVE next largest amounts, each, FIVE DOLLARS.

IN ALL FIFTEEN CASH PRIZES AS NEW YEAR'S PRESENTS TO OUR AGENTS, AND AS MANY MORE IN PROSPECT.

CANADA SUBSCRIBERS

Will remember that we are obliged to charge them *Six Cents a Copy more* for the Cultivator, and *Twenty-Six Cents a Copy more* for the Country Gentleman, than the prices above named, to cover American Postage to the lines.

The Illustrated Annual Register of Rural Affairs for 1858.

Number Four of the RURAL REGISTER will be found in no respect inferior to its predecessors. More has been expended upon the Illustrations it contains than on any previous number. Its contents cover a wide variety of subjects, and embrace a vast store of useful information, rendering it a compendious hand book for every owner of a country place, with chapters of peculiar interest to those about to Build, or to Improve; for Bee Keepers, Fruit Growers, those who wish to know what Fruits to select, and for all who cultivate Flowers or Vegetables, have Barns or Granaries to erect, Farms to till and enrich, Gardens and Lawns to beautify, Domestic Animals to procure and care for, or Households to superintend. 130 ENGRAVINGS—PRICE 25 CENTS.

Will our Agents please remember that we send One Dozen, post-paid, for Two Dollars! They will meet a ready sale in every neighborhood. Send for a Dozen, and try the experiment.

"RURAL AFFAIRS"—Volume One.

Under this title we have issued a new edition of the "ANNUAL REGISTER OF RURAL AFFAIRS," for 1855, 1856, and 1857, in one volume, handsomely bound—price One Dollar. The Calendar pages and advertisements which originally appeared, are now omit-

ted, but the difference in size is more than made up in the weight and quality of the paper. It forms the most beautiful and complete Museum on all Rural Subjects, ever issued at the price, and contains 440 Engravings!

TERMS FOR 1858.

The COUNTRY GENTLEMAN contains 16 large pages every week—making two yearly volumes of over 400 pages each! furnished at the low price of \$2 a year, or \$2.50 when not paid in advance. Subscriptions commence at any time.

The Country Gentleman and the Annual Register.

The price of a SINGLE COPY of each, to one person, is \$2.25; TWO COPIES, \$4.00; FOUR COPIES, \$7.08; EIGHT COPIES, \$13.16; and any larger number at the same rate, which includes the Postage on the REGISTER. Where, however, the subscribers are already supplied with the REGISTER, or do not wish it, we will send the COUNTRY GENTLEMAN alone as follows:—THREE COPIES for \$5; FIVE COPIES, \$8; TEN COPIES, \$15. New Volumes begin with July and January, each year—the 11th commencing with January 1, 1858. SUBSCRIBERS IN THE BRITISH PROVINCES will add Twenty-Six Cents a Year to the above Terms, to cover United States Postage to the Canada Lines.

The Cultivator and Register.

The price of a Single Copy of the CULTIVATOR is 50 Cents. As the new P. O. Law obliges us to prepay Postage on the REGISTER to Clubs, we have to add Two Cents to our Terms, for this purpose, as follows:

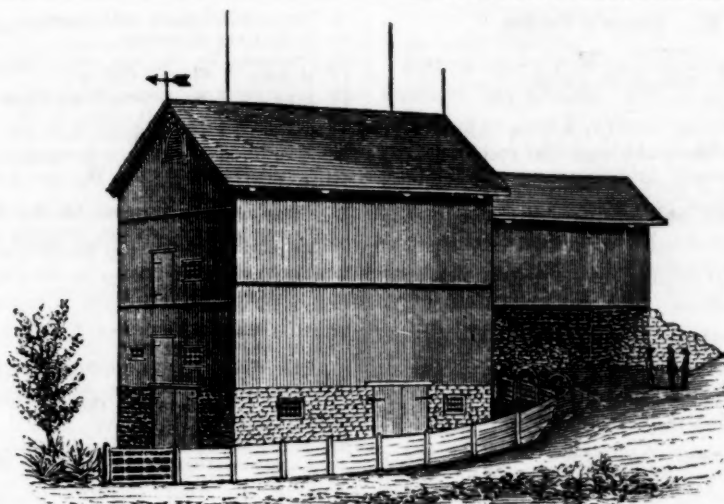
Ten Copies of THE CULTIVATOR, and Ten of the RURAL REGISTER, \$5.20
Twenty Copies of the CULTIVATOR, and Twenty of the RURAL REGISTER, (and one of each free to the Sender of the Club,) 10.42

SUBSCRIBERS IN THE BRITISH PROVINCES will add Six Cents each to the above Terms, to cover United States Postage to the lines. Ten Copies of THE CULTIVATOR and REGISTER will be \$5.80; and Twenty, \$11.68.

L. TUCKER & SON.

Culture of the Onion.

EDS. CULT. AND CO. GENT.—For the benefit of many of your subscribers, I will give you my experience and never failing method of raising onions. It is well known that onions cannot be raised from black seed in various localities. The cause is that the fish worm and grub are the occupants of the soil, and unless they are driven away from the root of the onion, it is very obvious that they will destroy it. My method in raising onions from black seed, is to plant the seed in rows 12 inches apart, raising a mold between the rows about two inches high, then digging a small trench on the top of the mold about half an inch deep, and fill with salt. This proves a preventive, and a never failing remedy. The salt dissolves and leaches in the ground about the roots of the onions, and is too strong a food for these visitors, and they will soon disappear. For more positive proof, just give it a trial. CALVIN R. C. MASTEN. Cream Hill, Washington Hollow.



WM. CARMAN'S SHEEP BARN.

A Sheep Barn.

On a recent visit at the residence of WILLIAM CARMAN, of Hector, Tompkins Co., N. Y., we were much pleased with a large hay and sheep barn he had erected not long since, and for the benefit of our readers we furnish a view and description.

It is three stories high—the dimensions are 34 by 50 feet—the bridge over the entrance is 14 by 32 feet, and the height to the eaves is 44 feet. It is built on the side of a hill, which forms one of the banks of a narrow valley through which a stream flows, the basement opening into this hollow, while the upper part is entered from the level ground above by means of the covered bridge.

The basement, built of solid stone masonry, is nine feet high. It is wholly devoted to the winter feeding

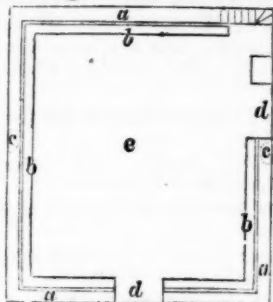


Fig. 2.

a a a, Walk for distributing hay.
b b b, Feeding racks.
c c, Shutes for hay.
d d, Doors.
e, Centre or area for sheep.

A shute on each side, 3 feet square, extends from over these walks to the top of the barn; into these the hay is pitched from the mow as it is needed in foddering, and it immediately falls down through the shute to the feeding walk in the basement. These two shutes are placed against the side of the barn, and are capable of opening in front for the easy discharge of the hay, as the bay is lowered.

Over the basement, bays for hay extend upwards to the roof, and are easily filled from the upper floor in unloading the wagons, which are driven into the barn by the covered bridge. This bridge is 26 feet above the bottom of the basement—the first story or base-

ment being 9 feet, the second 17, and the third 18 up to the eaves. This barn will hold over 100 tons of hay.

This is only one of many buildings on a farm of 350 acres. Our friend CARMAN has a range of barns in another place, the entire length of which measures 296 feet, besides three carriage houses and horse barns, a hog house, corn crib and other buildings. We observed nothing puny in the improvements—the farm gates are all fourteen feet long and about six feet high—a part of them are hung to posts of quarried stone, which are set in the ground five feet, and are some eight feet above it; and being two feet wide at the surface, do not sag. There are some formidable stump fences on the premises, to which some of these gates are hung, and are amply large enough to sustain them. We measured the roots of a single stump as torn from the earth, and found them 18 feet from the centre of the tree. There are many pine trees on the farm 140 to 150 feet high—a rough measurement of two made at the time being nearly or about 150 feet.* One pine tree measured by us (a sort of double one) four feet above the ground, was twenty-one feet in circumference. Indeed everything on the premises seemed of colossal magnitude, and even the owner himself is six feet and two inches high and well proportioned.

COUNTY FAIRS.—A correspondent thinks that County Fairs are departing so far from their legitimate object, that their usefulness must soon cease, and urges the establishment of Town Ag. Societies and Town Fairs to take their place. County Fairs were not established, nor is the money appropriated by the State, given to encourage horse racing, female equestrianism, or any other diversion; but if the Fairs are to be converted into places of amusement, instead of meetings for the promotion of improvement—why not, he asks, add "back sword and single-stick playing, sack-racing, climbing a greased pole, chasing a pig with his tail greased, &c." which he thinks would be quite as diverting and useful as some of the operations now entered upon to draw a crowd to our County Fairs.

The stallion "Membrino Chief," bred, we believe, in Dutchess County, and purchased there two or three years since by Hon. J. B. Clay of Ashland, Ky., has recently been sold by that gentleman to Messrs. Gray and Jones of Woodford County, for \$5,000.

* A pine was cut on these premises, and made seven saw logs, each sixteen feet long—the lower one was three feet in diameter, and the upper one 18 inches—the rest of the tree was branched. Some of these trees will afford 4,000 feet of lumber—and their value on single acres is estimated in some instances at \$300 per acre, while standing.

Sale of Mr. Stone's Cattle.

Morley, St. Lawrence Co., N. Y., Sept. 20, 1857.

MESSRS. L. TUCKER & SON—Having just returned from Mr. Stone's sale at Guelph, I will, as promised, give some account of the stock and the results of the sale. To begin with, it may be mentioned that Guelph is a well situated, well built, rather straggling town, upon the river Speed, about forty miles north-west of Toronto, and upon the Grand Trunk Railway, now open from Toronto to Stratford. The country between Toronto and Guelph is all apparently fertile and well cultivated; but as you are probably aware that this is one of the most fertile districts of Western Canada, it is only necessary to say that there was nothing to be seen in any way to lessen the opinion of the country that I had formed from hearsay. Residents of the neighborhood spoke of the wheat crops as particularly good, and the *fields* of turnips surpassed any thing I had ever seen.

Mr. Stone's farm is about a mile from the railroad station, and is a fine looking rolling piece of land, rising from the road to the house, and some distance back, and then sloping gradually to a second rise not so high as that upon which his buildings are placed. The stock was, a great deal of it, very much out of condition, probably owing to the fact that the last winter was very severe; fodder very scarce; hay and grain bringing such enormous prices in Toronto, that it must have been almost impossible to procure either for use at home.

The want of condition told very much against many fine animals, particularly Eleventh Duke of Oxford, Prince of the North, and the cow Desdemona, and several others. "Margaret," a magnificent animal, and "Eugenie," a fine young cow, a little coarse haired, were in excellent condition. The calves showed no lack of food or care, and as Mr. Sheldon of Geneva observed, made a most creditable show. The Cotswold rams were a beautiful lot; the Downs small, and not remarkable in any way.

At half after 12, M., the company having lunched, the sale was commenced, and there mustered a very fair number, principally Canadian breeders and neighboring farmers, but with a few from the States, including Mr. P. LATHROP of Massachusetts, with two other New-England men, Mr. EMERSON of California, who made several judicious purchases for his farm in San Jose, &c. The best lots were mostly bid in, and Friar John was not offered at all. Mr. Lathrop secured Lady Chesterford, one of the prettiest animals offered, perhaps the choice of the whole herd, and Mr. Emerson "Guelph," a splendid little bull. The principal sales, however, were to Canadians, and the highest prices were obtained after the sale, the most remarkable being that given by Mr. Snell, living near Brampton, for Fairy and her yearling produce Fancy, thirteen hundred dollars.

Annexed is a summary of the sale, which probably is all that you will care about.

Res. yours,

T. L. HARRISON.

To the list furnished by our correspondent, we have added from other sources, and thus made the catalogue of sales as complete as possible:

COWS AND HEIFERS.

1. Willey 5th, Henry Boulton, Humberford, C. W.,	\$110
2. Arabella 3d, Edward Jones, Stamford, C. W.,	180
3. Lily, Dr. Twining, C. W.,	105
4. White Rose, Saml Hodgkin, Guelph, C. W.,	180
5. Lily 4, no bid within time.	
6. Peach Bud, Mr. Buffum, New Hampshire,	100
7. Strawberry, H. Boulton, Humberford, C. W.,	100
8. Polyanthus, Ed. Jones, Stamford, C. W.,	250

9. Fairy, John Snell, Chingacousy,	650
10. Lady Cramer, bid in.	
11. Duchess, Mr. Buffum, New Hampshire,	255
12. Maude, A. Hogge, Guelph,	200
13. Rose 3d, I. Anderson, West Flamboro' C. W.,	120
14. Arabella 5th, H. Boulton, C. W.,	200
15. Pocahontas, A. Hogge,	215
16. Rose Bud, W. Whitelaw, Guelph,	90
17. Ruby, H. Boulton, C. W.,	410
18. Henna, bid in.	
19. Daphne, T. L. Harrison, Morley, N. Y.,	825
20. Dairymaid, John Dew, Toronto,	120
21. Bianca, Paoli Lathrop, South Hadley Falls, Mass.	380
22. Goldfinder, bid in.	200
23. Beauty of York, H. Boulton, C. W.,	205
24. Fancy, J. Snell,	650
25. Miss Maude, John Iles, Puslinch, C. W.,	150
26. Daphne 3, John Dew,	75
27. Lady Barrington 11th, J. Snell,	140
28. Rose of Summer, Mr. Emerson, California,	305
29. Picotee, Mr. Sheldon, Geneva, N. Y.,	75
30. Margaret, J. Iles, C. W.,	750
31, 32, 33, 35, 36 37, bid in.	
38. Lady Chesterford, P. Lathrop, Mass.,	500
39, 40, 41, 42, 43, 45, bid in or passed.	
44. Lady Bolton, Mr. Emerson, California,	450
46. Wallflower 7th, J. Ely West, Springfield, Mass.,	500
47. Lady Farnham, Mr. Emerson, California,	200
48. Miss Moreton, bought in,	200

BULLS.

1. John O'Gaunt 2d, A. Hogge, Puslinch,	550
2. President, no offer.	
3. Prince of the North, Thos. Arkill,	200
4. Twelfth Duke of Oxford bid in.	400
5. Friar John, not offered.	
6. 11th Duke of Oxford, Mr. Boulton, C. W.,	600
7. Guelph, Mr. Emerson, California,	650
8. Third Grand Duke, bid in.	
9. Grand Turk, Mr. Emerson,	800
10. John of Guelph, Mr. Emerson, California,	250
11. 3d Duke of Cambridge, Mr. Boulton, C. W.,	430
12. Cheltenham, T. L. Harrison, Morley, N. Y.,	150
13. Commodore, J. Ely, Mass.,	150
14. Master Butterfly, James Phin, Waterloo, C. W.,	100
15. John Bull, Paoli Lathrop, Mass.,	200
16. John O'Gaunt, 7th, G. Caldwell, Pilkington, C. W.,	100
17. Duke of Lancaster, bought in,	75
18. Emperor, James Gowan, Waterloo, C. W.,	50

THE COTSWOLD RAMS sold at prices varying from \$80 to \$160; the purchasers being H. Boulton, Humberford; John Card, Guelph; W. Whitelaw, Guelph; Mr. Buffum, New Hampshire, U. S.; Mr. Forster, Credit, C. W.; Thos. Bolton, Guelph; John Snell, Chingacousy; W. Ewing, Brantford; W. L. Felton, M. P., Sherbrooke; H. Tolton, Eramosa; Adam Hume, Puslinch; Evan Macdonald, Guelph; J. Anderson, Flamboro' West.

One Southdown Ram was sold for \$76, and one pair of Cotswold Ewe Lambs, \$100.

RECAPITULATION—44 Cows, Heifers and Calves brought \$16,450, average about \$373 each.

16 Bulls and Bull Calves brought \$5,680, average about \$355.

15 Cotswold Rams brought \$1,472; 1 Southdown Ram, \$76; Pair Cotswold Ewe Lambs, \$100.

Total Cows, Heifers, Calves and Bulls, \$22,130. Sheep, \$1,648. Grand Total, \$23,778.

How to Fatten Poultry.

EDS. CO. GENT.—Being a constant reader of your interesting paper, I should be glad to have some of your correspondents inform me how I can fatten my chickens.

I let mine run, and they have about 20 acres to pick on, and are well fed at the henery, but do not get to be in good condition for the table.

I have tried shutting them up, but they lose their appetite—are dull, and poorer than when they have their liberty.

How do the dealers get them into such fine condition as we see them in the market? BOSTON.

Will not some of our poultry-raisers give us a chapter on the above subject?

Draining with Stone and Tile.

MESSRS. EDITORS—The punctual appearance of your weekly Journal, fat with agricultural information, perpetually reminds me of a promise I made some time since, to give you our experience in draining with stone.

The greater portion of our land is low alluvial bottom, varying from three to four feet in depth, and resting on a clay sub-soil. It was worthless, when purchased, for the growth of any thing but swamp grass, and impassable to the plow. But draining has transformed what was a duck pond and skating ground, into fertile meadow, solid enough for the wheel of a mower or the plow.

We attempted, studying economy of outlay, to drain the wettest parts first, by cutting the drains with sufficient fall to the clay, then laying a culvert of cobble stones, half as large again as a brick, covering with flat ones, and then filling up with such small stones as would damage a mowing machine, to within eighteen inches of the top; over these, a layer of straw before the dirt was thrown in. We have an excellent, without an abrupt, fall, the land sloping with easy inclination to the central open ditch.

After having tried rubble drain in short lengths, where the water leaked rather than ran, it proves useless for permanent value. So also did that laid one stone upright and the other resting on it, lean-to fashion; the pressure probably from above and the side, causing it to slip and choke the channel. At any rate, after repeated bursts, we had to return to the culvert again as the only successful method. Furthermore, all stone drains, it must be remembered, are more or less liable, on arable land, to perforations by mice in search of water for winter uses, which causes a leakage in a strong pressure from the current above, if not a burst. And it is our advice, deduced from an experience in two and a half miles of stone drain, to use, where practicable, tile as the most profitable in the end. Stone drains answer a good pioneer purpose; for, having drained once, no man will abandon it, till he has drained to the end. And where land is laid lastingly to meadow, stone drains answer well, as the toughness of the sod prevents the upward pressure of the water that in plowed ground soon drills for itself a deep and disagreeable channel.

We are now putting in tile on flat bottoms with but little fall, for, confining the water to a narrower and smoother channel, and occupying less height, they allow a better drainage and deeper tilth. The horse-shoe, we prefer to the sole tile, where there is a hard bottom, as there is no possibility of any impediment to the movement of the current, which is apt to occur in slight inequality of the bed by raising one sole a trifle higher than another. JAMES ARKELL. *Canajoharie, N. Y.*

Ohio State Fair.

[Correspondence of the Country Gentleman.]

The Fair of the Ohio State Board of Agriculture opened at Cincinnati on the 15th Sept., and has just terminated. The grounds were large and easy of access, and lay immediately adjoining the city. The number of entries, both of horses and cattle, was said to be very much larger than they had ever had before, and probably the show was the best that has ever been held in that State.

In cattle, the Short-Horns outnumbered by far all the other breeds, though the Herefords and Devons were well represented. Considerable stock was there

from Kentucky, and a little from this State. Messrs. R. A. Alexander, G. M. Bedford, B. C. Bedford, Chas. T. Garrard and others, had Short-Horns from the former State, and Mr. W. H. Sotham represented this with his Herefords. The Ohio breeders were also out in full force with selections from their different herds.

The examination of stock took place on Wednesday, and commenced with the Devons. The herds of Mr. C. Ely of Elyria, gained the greatest number of prizes.

In Herefords, the prizes were divided between Messrs. Aston, Humphreys, and Sotham. Mr. Aston showed a remarkably fine two-year-old bull, and a very superior aged cow, both of which carried the first prize in their respective classes.

The aged bull ring of Short-Horns was very good. The first prize was taken by Mr. Clark's "New-Year's Day," and the second by Mr. Alexander's "Sirius." The competition was very close, and the judges were a long time in deciding. In the two-year-old class, Mr. Garrard's "Djalma" was first. Mr. Alexander's bull "Albion" carried the prize in the yearling ring. He is a very superior animal, and has never yet been beaten. Mr. Corwin's bull was second.

The aged cow-ring was a very superior one. There were 22 entries, containing the choice animals of both Ohio and Kentucky. Mr. Alexander's "Duchess of Athol" carried the 1st prize, and his cow "Vellum" the 2d. Mr. Dun's heifer won in the 2 year old ring, Mr. G. M. Bedford's "Ivanora" being 2d. The 1st and 2d prizes in yearlings were taken by Mr. Alexander's twin "Mazourkas," two remarkable heifers.

The exhibition of thorough-bred horses was small. Messrs. Reber and Kutz had a very fine two year old horse "Bronx," and a superior filly of the same age, "Young Fashion," both bred by Col. Morris, which were perhaps the best animals in this class on the ground. The show of other horses was much larger, though there were but few really extra ones.

The number of sheep on exhibition was large. Merinos were rather in the ascendancy. There were a few good long wools, and some good South Downs, though a large majority of the latter were very poor specimens. The show of hogs was very good.

The exhibition of implements was large and very superior. Plows and cultivators were in abundance, and many of them showed very superior workmanship. The Dairy Hall was but poorly filled, though there was some remarkably fine cheeses shown from Ashtabula Co. The Floral Hall was most beautifully arranged, and was decidedly one of the most attractive parts of the exhibition. I have never seen anything at any of our Fairs that at all equalled it.

I was indebted during my stay there to the various officers of the Society; and trust they will afford me the opportunity at some future time to return their many civilities.

To Destroy Lice on Cattle, &c.

MESSRS. EDITORS—In one of your late papers, some one inquires for the best means of keeping lice from cattle and horses. I can tell him how to do it effectually.

My father was a good farmer in olden times. But his cattle and colts would sometimes get lousy. Being the youngest son, it was made my business to take care of the calves and young colts, and see them safely through the winter. To keep the lice from them, I tried a decoction of tobacco, applied to their backs and necks. It never failed. I then tried Scotch snuff sifted on to their backs. That also proved equally efficacious, and was more convenient than the first experiment. But on examination I found that all the cattle and colts that were in the habit of standing before the barn-door, whilst the grain was being winnowed, and became well covered by the chaff, were never lousy. I then tried sifting the chaff-dust upon the calves, and found it as

effectual as tobacco in any form. Since that time, I have sifted upon the calves dry, fine dust from the streets, and find that equally as efficacious as either of the other experiments. Hens and chickens are apt to get lousy when kept in a close pen where they can have no convenient place to scratch in the dry dirt. But give them a chance to scratch and roll in the dry dirt, and they will never be troubled with lice. — J. L. EDGERTON. *Waverly, N. Y.*

Superphosphate of Lime—Correction.

EDITORS CO. GENT.—I exceedingly regret the error in my table of experiments. (See Co. Gent. vol. viii, p. 379.) It would have escaped my notice had it not been for the stringent remarks of Mr. J. H. HODSON. The figures do not accord with those in my book of experiments. In plot 2, the weight was 4,600 lbs., not 6,400. Also my remarks in reference to plot 2, should read thus:

"The superphosphate of lime had a tendency to increase the number of tubers, there being more small ones in this plot than any of the others. The only advantage in using this manure is the improvement in the flavor of the potato."

These errors were made by the printer. I hope under the circumstances you will insert these remarks, that they may in some measure remedy the mistake.

I have tried other experiments with superphosphate of lime as a manure for the potato, in progressive quantities of two, four and six cwt. per vergee, but it had no effect in increasing the weight of the crop. Meeting with this anticipated result, I do not see the utility of increasing the quantity of this manure.

I do not think much reliance will be placed by the public on the experiments of persons interested in the sale of superphosphate of lime. Far better would it be for them and others to have the experiments conducted by some agriculturist of well known integrity, who would have nothing to do with the profits of the manufactory. The results of experiments tried and recorded by the seller of a manure, however faithfully it may be done, will invariably be looked on with suspicion by the buyer.

Genuine superphosphate of lime, as an auxiliary manure, is one of the best the farmer can expend his money on, particularly for the turnip, parsnip, carrot, onion, Windsor and horse beans, peas and radishes. If I can possibly find time, I will endeavor to explain why superphosphate of lime does not increase the weight of the potato crop. JAS. LEVESQUE. *Island of Jersey, Aug. 7, 1857.*

Ornamental Shrubs.

I have a grass plat in front of my country residence that I wish to embellish with ornamental shrubbery. I desire to obtain such a variety as will give me the largest amount of flowers and foliage for the greatest part of the year that I can.

Will you furnish me a list of such shrubbery as will best serve my purpose? I suppose it will require twenty-five or thirty small trees to cover it. I also want to know what are the best climbing, monthly, fragrant, hardy roses, red and white, for ornamenting a porch? Our winters are very severe, therefore every thing must be quite hardy. T. *Wheeling, Va.*

The following are some of the best hardy shrubs:—

Japan quince, scarlet and white; Tartarian honeysuckle; dwarf flowering almond; Philadelphus grandiflorus; Siberian lilac; pink mezerion; Missouri cur-

rant; scarlet hawthorn; white fringe tree; purple fringe; silver bell; tree pæonia; spirea subifolia; snowball; Deutzia scabra; and all the hardy summer Roses, among which may be mentioned as most beautiful, the Scarlet Austrian, Crimson Boursault, Madame Plautier, George IV., Eonue Genevieve, La Tourterelle, Triumphe d'Abbeville, Aureti, and many others; also La Reine, Mrs. Elliot, Duchess of Sutherland, and a few other hybrid perpetuals.

We know of no hardy climbing monthly roses. The best climbing roses do not continue in bloom through the season—among them, prominently, are Queen of the Prairies and Baltimore Belle—furnishing, when grown together, a rich profusion of red and white flowers. There are several other prairie roses of great beauty, as Pallida, Superba, Perpetual Pink, (not perpetual, however,) Triumphant, &c. The Ayrshire roses, white and blush, are fine runners. The scarlet trumpet honeysuckle blooms all summer, and should not be omitted; and the yellow trumpet and fragrant are also very desirable.

Culture of the Cranberry.

ANSWER TO INQUIRY.

MESSRS. EDITORS—I would recommend the setting of cranberry plants two to two and a half feet apart for large plots, and fifteen to eighteen inches for small ones. At two feet, it requires 10,000 plants to set an acre—at two and a half feet, 7,000—at eighteen inches, 19,000. But I prefer to set three plants in each hill, which would require 30,000 to the acre, at two feet. Set at any time when the ground is not too dry. I have set them at all seasons, except when the ground was frozen, with success.

Manner of Setting: I prefer Edmund Bagley's method. "Cover the runners up, leaving just the tops of the lateral shoots or sprouts out of the ground. This should be done whether the vines are cut or not."

For upland, Elias Needham considers about 21,000 plants sufficient for an acre. I set them thicker.

The soil most suitable for their growth, is low wet marshy ground. They also do well on muck, or any poor swampy land, where nothing else will grow,—by taking off the top of the ground to remove the wild grass or vegetable matter, and then carting on beech or other sand to the depth of two or three inches, to level the ground and prevent grass and weeds from choking the vines, and to keep the ground loose around the plant.

For borders and garden plots, spade out the manured surface a few inches deep, and form a new surface, of sand three parts to one part muck, on which set the plants according to fancy. The thicker they are set, the sooner they become matted; if set close, a full crop may be expected the second or third year: two inches is not too close for borders.

They bear abundantly on marshes covered with coarse sand, entirely destitute of organic matter of any kind, but accessible to moisture—on pure peat covered with sand, and on every variety of soil, except clay, liable to bake or become hard in dry weather. On soil that can be worked with a plow or harrow, it can be prepared as you would do it for planting out garden and other plants; sometimes it can be burnt over, so as to get it in a condition to set out the plants. They can also be raised on moist loam, where corn and potatoes will grow, but not so abundantly on dry or sandy soil, unless covered two or three inches with muck. A more simple mode, where there is hardly any thing but bushes and bogs, is to strike a hoe into the soil, and raise it a little to insert the roots, and press the soil slightly with the foot. No animal or vegetable manure should be used. D. L. HALSEY. *Victory, N. Y.*

Cures for Sweney

We have two more replies to the inquiry for information on this subject. Mr. C. D. GRAY of Castle Creek, N. Y., says:

"Take 20 drops oil of vitriol, (sulphuric acid,) put in oil of spike till it will not burn a cotton cloth. Grease the hoof all around next to the hair (to prevent it injuring the hoof;) then with a swab apply the medicine to the enlarged part, and heat it in with an iron previously heated for the purpose. Put it on every other day for nearly two weeks, and the bunch will gradually disappear. The hoof must not be wet while you are doctoring it, nor for three days after. It might be well to add that the above will not take off the hair, nor disturb the skin apparently.

MESSRS EDITORS—I got the following remedy from a Mr. Hicks, a horse drover from Ohio, and have cured two of my own horses, one of which had the Sweney in both shoulders, and have known other horses cured by it.

Soak the foot of the diseased shoulder one hour each day for ten days, in warm water; then have the animal shod, and after shoeing turn the foot up, and with the blacksmith's tongs press the shoe open, which last operation may be repeated twice a week until the cure is performed.

The seat of the disease is in the foot, and when the foot is relieved the shoulder is relieved. I have known a horse swenied by a piece of corn-cob getting jammed in his shoe so as to press on the inside of his foot; the cob was removed, and in a few days the horse was well.

CURE FOR SCRATCHES.—While I am writing, I will give the best remedy for the scratches I ever tried. It is simply a strong solution of urine and copperas, with which wash the diseased parts well once or twice a day.

Should you publish the above receipts, I have no doubt you will have the thanks of all who try them. JES. B. WHITEHEAD. *Smithfield, Va.*

How to Increase Your Manure.

Manure is the prime want of the New England farmer. Its preparation and application is the foundation of all successful culture.

Without it he may underdrain his land in the most approved manner, loosen the sub-soil to any extent, plow, mix, pulverize and cultivate to infinity, and yet cannot produce remunerative crops in succession; in short his expense will be incurred in vain, his labor lost. With it he may make all these expenses afford him an annual profit, of large per cent; may reap a rich reward for all his labors in the most abundant crops; may improve his farm until every rod of it shall become fertile as the most productive garden, and beautiful as anything in nature can be.

How then shall this want be supplied? Shall we go abroad and search the whole earth for sources of supply—bring lime from the distant kilns—improved poudrette, phosphate, superphosphate, ammoniated superphosphate, and muriate of lime from our large cities—shell lime, fish manure and animal fertilizers from the sea coast—plaster paris from the north countries—green sand marl from the south—salt from the Atlantic—guano from the far off isles of the Pacific—wool waste, horn shavings, bones and bone dust from all regions?

Shall we do all this, and incur almost unlimited expense, while the substantial good we seek is within our reach, on our own farms, but being wasted and

lost, and by its decay and loss, increasing earth's pollutions, and multiplying the sum of human sufferings? Would it not be better economy and wiser to husband our home resources first?

Many intelligent men believe that there are placed within the reach of the farmer, ample materials to fertilize all the land he can profitably occupy.

However that may be, it is certain that there are materials at hand, which if carefully saved and composted, or otherwise prepared, would vastly increase his present supply. And when manure is itself the product of the farm, instead of being obtained at the cost of other farm products, it is then, and perhaps only then, the main-spring of all real profit in farming operations.

Consequently he who succeeds best in the home manufacture of manure, other things being equal, is likely to be the most successful farmer.

But where even at home, shall we look first for the supply of our prime want?

I answer, to the barn-yard, or more properly the barn cellar. And I believe that among all the fertilizers ever invented, or discovered by man, there is none which, in all respects, surpasses, nor even quite equals in permanent value, the droppings of the farmers' domestic animals, composted with such materials as every farmer may readily obtain in his own vicinity.

I am aware that there is a great diversity of opinion in regard to the relative value of the article in question, and that even "Doctors disagree" as to the best methods of applying it. But I am also aware that all practical farmers in New England, agree in assigning it a high positive value, and succeed in finding some profitable method of application. It is true that some complain, that as they apply it on their soils it heats quickly and exhausts its own powers long before the crop, for which it is intended, is fully matured, while others say that it lies cold and heavy in their soils, without affording apparent benefit to the crop, until late in the season. I think these difficulties however, and their remedy, may generally be explained by a knowledge of the manner in which the manure is prepared and used, and of the soil to which it is applied.

I suppose that the solid excrement of animals yields a large proportion of seed-forming elements, and that these elements are developed slowly, not acting upon plants materially in the early stage of their growth, while there is a deficiency of those elements specially needed to produce a luxuriant growth of leaves and stalks: so that if a crop, as of corn for instance, be cultivated with this manure alone, there will be danger that it will grow slowly, and be small, although what seed it does yield may be of superior quality.

This deficiency in the solid, is richly supplied in the liquid excrement, which affords in abundance, those elements most needed to insure a rapid and healthy growth of leaves and stalks, while it lacks a supply of those so largely furnished by the former. And if the crop were cultivated with the liquid alone, applying it, as our farmers commonly apply their manures, before the growth of the plant commences, it would be forced in the early stage of its growth, and would present a magnificent display of leaves and stalks, while there would be great danger that the ears would not fill out, and that the kernel would be imperfect.

If this supposition be correct, it will be readily seen that it is of the first importance that the farmer should save with the utmost care both the liquid and the solid excrement of all his animals, and protect them from all exposure to loss, that the two may be intimately blended, and applied together to his fields, to furnish in unison, all the elements necessary to give a quick start to his plants, to produce a rapid and luxuriant growth of leaves and stalks, and to supply a rich harvest of "full corn in the ear."

But even if the supposition be not correct, there is still sufficient proof that both the liquid and solid ex-

crement of our cattle, are of too great value to justify, as is still too frequently the case, their exposure to the scorchings of the burning sun, the "pellings of the pitiless storm," and the driving blasts of all the winds of heaven.

Instead of such exposure, let some shelter be provided for our manure, which shall protect it from the sun, rain and wind. A barn cellar is the best: Let an abundant supply of some absorbent be procured,—and nothing is better than good dry meadow muck; and used in quantities sufficient to absorb all the liquid droppings of all our cattle, and mixed every day with the solid manure.

From my own experience in preparing manure, I believe two cords of compost prepared by mixing daily one cord of dry muck with the same quantity of solid excrement of animals, to be fully equal for all practical purposes, to two cords of the latter, preserved and applied without the muck; and also that two cords of compost, prepared by using that quantity of dry muck, to absorb all the liquid voided by the same animals, during the time required to obtain the one cord of solid excrement, to be equal in value to two cords of the former compost. Thus we have four cords of equal value by this process, to every one cord obtained where the manure is thrown out of doors and left exposed to sun, wind and rain, and all the liquid allowed to run to waste.

I would have the compost thus preserved, worked over two or three times, being carefully covered with muck after each overhauling, and kept under cover until needed for use, when it should be drawn directly to the field, spread evenly, plowed in as soon as possible, and mixed thoroughly with the soil.

If the soil is of a light sandy or gravelly character, I would use dry clay freely, in connexion with the muck, for an absorbent; if heavy and composed largely of clay, peat, or swamp mud, I would use sand instead of muck.

And now if after having quadrupled the quantity of manure formerly obtained from our domestic animals, by our wasteful mode of preparing it, there is still a deficiency, shall we dip into the fancies?

Not yet, brother farmer; not quite yet. Let us try once more at home, with our labor, before we go abroad with our money. There is still that exhaustless bed of meadow muck, "Dana's vegetable cow manure," into which we may dip again; rich as it is in nearly all the elements contained in the solid excrement of our animals, it only needs something to give it the life and vigor, the forcing qualities, which the liquid imparts to these. And there are innumerable ways in which that something may be obtained.

Let the muck be dug, and exposed to the frosts of winter, to aid in its disintegration and correct its acidity, and to the burning sun of summer, to remove from it all moisture and the poisonous gases engendered in its swampy bed. Then let it be composted with any animal matter found about the premises, or in the vicinity: the carcasses of all dead animals, large or small, offal of every kind, woolen rags, bones, old boots, shoes, and waste leather of every description, the droppings of the hen roost, soap suds, salt brine, all drainings from the sink spout, slops from the chambers, and cleanings from the privy: let all go to the compost heap. And whatever will not decay there, with sufficient rapidity, without assistance, aid its decay by the addition of such substances as will facilitate the object.

Bones, leather, &c. may be softened so as to pulverize readily, by being packed in ashes and kept moist a few months; and if the whole be sufficiently covered with muck during the process, there will be no loss of any element; or they may be packed in an old cask in a strong solution of potash, or may be prepared with sulphuric acid in the most scientific manner, and when thus prepared in either of these ways, will add greatly to the value of the compost heap. And if it still is not strong enough, add wood ashes to any extent, from

one to ten or twelve bushels per cord,—and I fully believe with Dana, and from experiments tried by his suggestions, that eight to ten bushels of ashes alone per cord, will make the muck, when properly mixed, equal to common stable manure,—or soot or charcoal dust may be used if easily obtained.

When thus prepared, our compost heap should be carefully worked over, thoroughly mixing all the different ingredients. It may then be applied to the soil, in the same manner with that from the barn-cellar, or in any other way desirable. It has been found to be an excellent manure for fruit trees and grape vines, also for application to sowed crops, as wheat, barley, &c., and as a top dressing for grass lands.

But what if the muck cannot be obtained in sufficient quantities, at a reasonable rate?

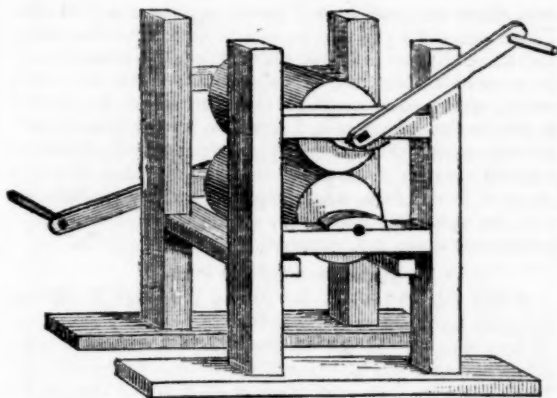
Why then, I would gather instead, turf, soil, or loam, from our headlands, from the road sides, from old walls, from ditches, or from any other source, and would mix with it every waste material of a vegetable nature, to be found about the farm.

I would save and mix with this heap, all leaves, straw, chips, brush, weeds, potato tops, corn-cobs, breaks, briars, &c., and would hasten the decay of the coarser articles by the addition of urine or lime, being careful to have them well covered and kept moist during the process of decay. When thus prepared and dried, I would use this heap for an absorbent, or for compost, in the same manner as the muck.

And if after having saved all the articles enumerated, as carefully as if they were grains of gold, still more manure is needed, why then try the concentrated fertilizers of commerce. But let it be the last resort, and even then remember that every addition thus made to the products of your farm, should thus afford additional materials for the increase of your next year's home-made pile, and thus lessen the necessity for the future purchase of fancy articles from abroad.

These remarks are not intended to apply with the same force, to farmers in the immediate vicinity of large cities, as to those in the interior; nor to those whose main business is to raise produce to sell in the crude state, as hay, grain, root crops, &c. These must, of course, return to their farms in some form, the elements they so constantly draw from them to send abroad. Nor would I be understood to discountenance the use of liquid manure, in the liquid form; on the contrary, I most heartily approve of it, by those who have or are willing to procure the necessary facilities for the purpose. Neither do I object to the purchase of foreign manures by those who economise their home resources. Let such purchase and use the fancies to any extent they can make profitable. The main object is to induce our farmers to practice the most rigid economy with regard to everything upon their farms that can fertilize. W. G. WYMAN. *Fitchburg, Mass.*

MANURES.—I wish to make more manure than I can make from my straw, hay, &c. How would it do to gather forest leaves? Would it pay? If so, which would the best plan to make them into manure? In the barn-yard, or in the compost heap, with or without lime? The desired information will be thankfully received C. F. *Clarion Co., Pa.* [Forest leaves are admirable for assisting in the manufacture of manure, and may be used to advantage, if easily gathered. The best way is to rake them with a stout rake, fill large baskets, and draw them in a large wagon-box large enough to hold one or two hundred bushels, and made on purpose. A man and one or two boys with a team, will draw a large quantity in a day, late in autumn. They can be gathered most rapidly in hollows where the wind has blown them. They may be used in a barn-yard to great advantage, and make a superb litter for horse and cow stables, and fine short manure for spreading. They may also be used in a compost heap, but we prefer turf for the latter purpose.]



Hand-mill for Crushing Chinese Sugar Cane.

MESSRS. TUCKER & SON—We have a small hand-mill for crushing sorghum, or Chinese sugar cane, in operation here, which I will briefly describe. It is wholly of wood, and consists of four posts of 4 by four oak, 2 feet 10 inches long, set up vertically. Two pieces of 2 by 4 are tenanted into these, running horizontally at a distance of nine inches in the clear above each other. This makes the two halves of the frame. These are held together by a double or broad tenanted piece of 2 by 6, at each end, 9½ inches long, just below the lower horizontal side piece. These six horizontal pieces are all secured in the frame by tapering wedges, so that it can be quickly taken apart, and the distance between the rollers thereby regulated, so as to crush the cane more or less.

The rollers are 9 inches long by 8 in diameter, placed one precisely over the other—having, of course, been accurately turned—and have a projection left on each side to which a handle or winch, with a crank two feet long, is attached, (similar to a well winch.) The axis of lower roller rests on the two horizontal pieces of 2 by 4—that of upper roller directly under—the axis working partly in the corresponding or upper piece. The ends of each roller are held in place under and over each respectively by wooden fittings and long screws. There are two winches, one to each roller, affixed on the opposite ends, and two men on opposite sides of the frame turn the rollers towards each other; a boy feeding in the cane. The legs of the frame are fitted into two inch plank, raised on legs to suit the height of those who turn the winch.

The seed heads are first cut off and the leaves stripped off: then the stalk is slightly pushed as it is fed in. This machine crushes the stalk thoroughly—though it is hard for two men to turn.

It is easy to see that its power might be trebled by leaving a projection when turning, on the opposite end of each roller to that which the winch fits, for a band attachment. A band from the projection of each roller might be carried back eight or ten feet—both to one large roller turning on frame, or in crotches, fixed fast, with a fly wheel, by one or two men, according to power required. This would give a power equal to that of six men on winches, which would be sufficient to crush the cane effectually and without fatigue. J. W. CLARK. *Marquette, Wis., Sept. 25, 1857.*

P. S.—We have made syrup, and it is very good. My stalks are 12½ high. I think the Imphee is sweeter than the Sorghum. J. W. C.

THE SUGAR CANE MILL.—In a hasty description of a small mill recently forwarded (see article above,) I omitted to state that the wedge that keeps the horizontal side pieces down on the journals of the rollers, can be moved, and a plank loaded with five to fifteen

cwt. of stone or other weights, placed on top of said side pieces, so as to press the upper roller down upon the under one perpendicularly. The mill operates better thus loaded, than when fixed at a given width between the rollers by wedging; because when weighted only, the pressure of the rollers is the same, but the width between them is graduated as the cane passes through according to the resistance of the cane resulting from size, hardness, &c, while the mill is much more easily operated, and crushes as effectually as when wedged. J. W. C.

Molasses from the Chinese Sugar Cane.

Sorgho looks fine, such as is standing, as a few mornings since I found about half my crop entirely prostrate. I have about 1,000 hills. It had grown very rapidly, and some of it is 14 feet high. I presume it fell from being top heavy, although many of the stalks are 1½ inches in diameter. It was planted May 21, on ground which probably would have yielded 45 or 50 bushels of corn to the acre. I planted three seeds in a hill, hills three feet by two apart, and as some of the seed did not come up, I added seed enough to make three stalks, i. e. if but one of the first planting was up I put in two more seeds. By this means no hill could possibly have had more than six seeds, for allowing the three first planted did not germinate until I had replanted, three more would make but six; still when I thinned it out, I found as many as 16 stalks in a hill, and one hill I left with that number in. As so much of my crop was down, I cut 20 stalks, on all of which the seed was quite green. After taking off leaves and top, I carried the canes to my mill, and I found them as much of a load as I care to carry at one time. I think I would have done as well to have taken my mill to the canes, for it consisted of but a rolling-pin and a small piece of oak board planed smooth; yet with this inefficient apparatus I pressed out of the 20 canes three quarts of sap, and I verily believe I obtained but half as much as a good mill would out of the same canes. I then boiled the three quarts down to a pint of very good molasses, as thick as what was called in my boyhood days in N. Y. city, "sugar-house molasses," and much thicker than the molasses of the present day. The color is similar to maple molasses, and the flavor much like that of syrup from stewed pears. My family are very much pleased with it. A yield of a pint to 20 canes is at the rate of 272 gallons to the acre, provided it was planted in hills three feet by two, and six stalks in each hill. I am satisfied it will be a profitable plant for making molasses, and for fodder I doubt if it can be equalled, sending up so many stalks in a hill. I believe an acre sown broadcast would yield a large amount of fodder, and more than a sufficiency of molasses for any farmer's family for a year.

I shall make another trial with canes nearer maturity, and also make some sugar. P. A. S. *Quincy, Lewis Co., Ky., Sept. 20.*

P. S.—I have just (24th) taken the seed from one head of cane, and after thoroughly drying and cleaning it, find its weight 2¼ ounces.

MADISON CO. FAIR.—A correspondent furnishes us some notes of this show, from which it appears to have been in horses remarkably good, in cattle superior to former years, in other stock better than last year, small in dairy products and the mechanic's department, and fair in flowers and fruits. A storm on the last day was felt in the receipts of the Society, which has cause for congratulation in all other respects. S. P. Chapman, Baker & Son, and others, contributed to make the display of Short-Horns of more than average value and merit.

Culture of Millet.

MESSRS. TUCKER & SON—I see in the last number of your paper, a paragraph asking information concerning Millet. It is but a few days since that I wrote to ask if there were any pamphlet or papers upon the subject, and received from my correspondent, a large seedsman, the reply that he knew of none; but having just finished harvesting a crop, I intend to send you my experience.

A piece of sod land, turned over last spring—the soil a stiff clay—I selected for my first experiment. Upon half an acre I sowed 500 pounds pou dreite—harrowed—then sowed twelve quarts of the millet, and again harrowed, and in the last proceeding committing a great error I am told, the seed to be properly covered requiring bushing. This was finished the 18th of June. Upon the 1st of July, half an acre of land plowed last fall, and again in the spring,—was harrowed—100 pounds of guano sown, and the seed in the same order as before, still harrowing in.

Upon the 24th of August I cut the first mentioned, the seed having ripened in the heads. Upon some spots where barn-yard manure had fallen, the stalks stood five feet eight inches in height, the rest averaging three feet six inches. Having been badly sown, there were bare spots. The yield was however, rather more than a ton and one half.

On the second half acre, I cut, on the 10th inst., more than two tons—the same fault in sowing occurring. The average length of stalk being about the same.

As far then as I can judge from the result of these attempts, the millet will prove very well worth the attention of the farmer. Next year I hope to try it upon land in better condition, and upon a more extended scale.

I can give no idea of the quantity of grain to the acre, from the seeds. I should imagine it would be very large, though I am inclined to think its principal value will be as fodder.

Before closing, let me observe that the pou dreite has proved with me worthless. In the hill with corn, it gave it a darker tint, and then apparently ceased. H. A. G. *Ashford, Ct., Sept. 22, 1857.*

Power Hay Fork, Hay Caps, &c.

EDITORS CO. GENTLEMAN—We procured from one of your advertisers last spring, the "Self-adjusting Hay Elevator," and it proves to be a greater labor-saver than it promised. We have unloaded hay and loose grain at heights of from ten to thirty-five feet—in time, from five to ten minutes a load—sometimes at four, and seldom more than eight forkfulls to clear the wagon. It allows, in such Dutch barns as ours, where the hauling is short, to double or nearly so without sweat, the quantity housed in the day. The support for the upper pulley block we made by putting a clevis in the rafter peak, three feet over the mow, thrusting the clevis bolt through the peg hole used for pinning the rafters together. The fork requires a space of about eight feet to move easy with a large loading, although six will answer where the barns are so situated for the upper filling in. A few rough boards nailed from the floor to the first cross beam, and when full so far, to the second, prevents the fork's dragging up the mow. In thrashing we use it to take the straw from the floor to the peak, saving thus the passing it through the hands of three pitchers, besides carrying it up in much bigger "chunks."

HAY CAPS.—We experimented this season on this modern protector, and the result is, that I believe the small caps of three feet square are comparatively use-

less, those one and a half yards square the best size. Those not oiled did not keep out the wet effectually, but those dipped in boiled oil repelled the rain of nearly a week's duration, so as to require but an hour's airing of the cocks to fit them for drawing. The stones sewed in the corners will, I think, be abandoned on trial, as they make them too heavy to move in quantities, besides proving inadequate in a brisk breeze to retain them in their place, while pegs not only hold them on, but also spike the hay from caking off the top, as it sometimes does, cap, stones and all.

OSAGE ORANGE HEDGES.

When the thermometer last winter exhibited the cautious mercury retiring to the bulb, down from line to line, pausing at 30° below zero, we feared among other fears for our pet hedge plant, the Osage Orange. But, with the common protest that other vegetation gave, in tardy leafing, it came forward in the spring, and now, from the sharpness of its thorns and the gloss of its foliage, you would think it never had dreamt of a chill. We have a piece five years old, that would turn the breachiest horse, but owing to its not being cut back low enough at first, it is not compact at bottom. We are now, confident of its hardness, dividing our fields with this substitute to stake heaving, rider breaking, worm and rail nuisance.

I had intended to add a few remarks on drovers and their action hereabouts, but I have trespassed too far, and if "brevity is the soul of wit," shortness, I know you sometimes think, is the cream of wisdom. JAMES ARKELL. *Canajoharie, Sept. 21, 1857.*

Fruit Tree Borers.

These, like the wheat midge, seem to be on the increase in the older regions of country, and to be making their way westward into the more recently settled states. In Ohio, Indiana, and other comparatively new states, we see notices of their presence and ravages.

The methods heretofore employed to destroy these gimlet armed insects, seem to prove not frequently utterly inefficient. We meet with complaints of their continuing their destructive gimletings, notwithstanding all the efforts made to extirpate them by punching them with wire and whalebone, cutting and digging them out, plugging them in, and using various kinds of washes. Probably these methods are all successful to a certain extent, and would be more completely so if they were more generally or universally employed. But it is with these pests as it is with some kind of weeds: There are always some in every neighborhood who are too lazy or negligent to use means for their extermination, and thus they get a chance to spread, causing trouble and loss to the innocent as well as to the guilty.

What is most wanted and most likely to be effectual, therefore, is some method which will be so easy of application as not to appear to the diseased imagination or fears of Mr. Lazybones or Mr. Puttoff as "a great chore," or "too big a trouble."

In a previous volume of this journal Dr. FITCH recommended a method which, we doubt not, would be effectual as a preventive, and perhaps as a cure, and one which need not alarm even the laziest, viz., to wash the bark of fruit trees with a solution of soda or potash, or common soft soap. To save the time of the busy, or the work of those who have a dread of work, Dr. FITCH suggests that putting a goodly coating of soft soap into the larger and lower crotches might answer this purpose, by being washed down by the rains. He thinks this application of alkaline or soapy solutions, or soap itself, to the bark, would render it so distasteful to the insect mother that she would not lay her eggs in it. The addition of a little aloes or quas-

sia to these solutions would be likely to make them still more effectual.

Another method which seems not very troublesome, and which has in view the killing of the borer as well as the prevention of the laying of more eggs, consists in raising a little concave mound of earth around the base of the tree, and pouring upon the tree or washing it with some offensive or destructive liquid. Solutions of salt, brine, urine, and boiling water have been proposed for this purpose. Of these the application of boiling water is said to be certainly efficient, while at the same time it is affirmed by several to be *quite safe*. Brine and solutions of salt would hardly be safe.

Any of these methods are easy of application, more so than punching, &c. If employed by a whole neighborhood in June and again in September or October, these pests would be greatly abated if not wholly exterminated. *

Horse Shoe and Sole Tile.

MESSRS. TUCKER & SON—I see in your last number an inquiry in regard to tile draining, as to which is the best, horse shoe or sole tile. In a clay or gravelly bottom, horse shoe tile is as good as sole tile, if the descent is not too great—not more than one foot to the rod—if more, in time the bottom will wash away, if boards are not used. In a bog, quick sand, or soft bottom, where a man sinks when digging, probably horse shoe tile are the best (according to the method of most draining here at present) *where a board has to be used*, because they are cheapest according to size. I prefer sole tile without boards in almost any kind of ground, if I am allowed to dig the ditch, as I dig it no wider than just to admit the tile—no matter what size; and I am confident that the tile are no more liable to settle down than the dirt that came out where the tile are put. If the ditch is dug no wider than just to admit the tile with an even descent, and the tile put in the bottom, end to end, that is all that is required. Then fill in your dirt as fast as you please. GEO. ALDERSON. Albany.

Composition Walls for Buildings.

MESSRS. EDITORS—I have read a communication in the present volume of the Cultivator, p. 109, which is so far explicit, but to the uninitiated in composition walls, leaves something unexplained. In the same volume, p. 192, I find a quotation from the Maine Farmer addressed to J. E. S., but which I have not yet seen answered. If answered, it would almost contain all I want to know, although I might add—What kind of cement is best for the blocks when laid in the walls? and would the half of the blocks be better made of half the length of the others, in order to make break joints? If J. E. S. or some other of your numerous correspondents who know sufficiently about the matter, could be induced to answer these inquiries, they would confer a great benefit on me as well as many others, particularly of your western readers.

A number of farmers here have tried the composition walls after the manner of Mr. Fowler, but all have failed at various stages from the bad quality of our western lime, or from bad workmanship, with the exception of one, who was at great pains to get good lime and assisted in the workmanship himself; he has got up a fair substantial looking house, but from the cellar being of the same composition, and no drainage being adopted, a portion of the wall at the ground has been burst by the freezing of the last severe winter. I have concluded to build my cellar of stone two feet at least above ground, and then try the blocks, which I think must be much superior to the "grout wall."

I think if some person would publish a small cheap

pamphlet, giving full and explicit directions for building the various kinds of composition walls, with the latest improvements, he would find the work profitable. I may also ask where the best lime is to be had, for I should have it if I have to send to New-York for it. J. M. M. Summerville, Mich.

Raising Melons and Cucumbers.

While recently partaking of some very fine water-melons at the house of a neighbor, he informed us how he raised them. He first made a trench two feet wide and a foot and a half deep. He filled this with fresh or heating horse manure, about six inches above the surface, or two feet deep in all. This was covered with three inches of soil. He then took a sharpened handspike (a crowbar would probably do) and made a hole down through the manure by striking it repeatedly and briskly; and then working it about, made the hole some ten inches in diameter. These holes were made for the melon hills, about six feet apart, but eight feet apart would probably be better. The holes were then filled with fine rich garden mould, and the seed planted. In no case is more than two plants left in one hill. The heat of the fermenting manure, and the fertility added, causes an early and rapid growth, and early fruit.

The most simple and certain mode for determining the ripeness of the melons, although not new, he finds is to observe the tendrils. On strong healthy runners, the tendrils die opposite to the melon as it becomes ripe, and dead tendrils are a reliable indication. We never found any thing so good and simple as this.

If, however, the runners are crowded, and allowed to grow in a thick and confused mass, the tendrils will die much sooner and indicate nothing.

Another neighbor seeing this mode of planting, immediately tried it with cucumbers, and had a supply long before any others had thought of looking for them. Let our readers now make a memorandum on this point, and thus be prepared for successful operation next spring.

How to Preserve Cider Sweet.

MESSRS. EDITORS—From time to time many ways have been recommended, and many directions given, to preserve and keep apple cider in a way that it will retain its freshness, and that peculiar flavor that it possesses when it is first manufactured, and also to prevent its becoming hard and sour. Of the various methods proposed, more or less expense and inconveniences attends them all; but the most effective, the simplest, and the cheapest way that I have ever tried, is to scald the cider previous to its fermentation. My method of treating my cider, which I wish to keep sweet and fresh, is to heat it until it boils; then take it from the fire and cool it; put it in casks, and close them air-tight. In this way I have kept it without any apparent change until cider that was put up without scalding would be sour enough for good vinegar. How long it may be preserved in this way I do not know, but any one can easily determine by trying the experiment.

By boiling down new cider from one-third to one-half, an excellent syrup can be made for culinary purposes, which can be kept for any length of time as well as molasses; and any family by preserving cider in these ways, and also having a supply of dried apples to use when green ones fail, can supply themselves with many cheap and healthy dishes of food which they would otherwise be deprived of.

This apple syrup is valuable as a medicine, and is much used in this vicinity for the cure of colds and coughs, and I have known families who used no other article for their children when troubled in that way. C. T. ALVORD. Wilmington, Vt.

Wheat and Chess.

MESSRS. EDITORS.—The September No. of the Cultivator, p. 289, contained an article headed, "wheat turning to chess," in which I read with pleasure the experiment of Mr. Davidson; and think it proves just what many observing farmers believe to be a fact; that wheat, when "winter killed," or "fed off" in the fall or spring, will produce *chess*, *cheat*, or *false wheat*.

The theory I believe to be this: When wheat seeds are sown, they spring up and produce, under favorable circumstances, stalks and heads of matured wheat; but under unfavorable circumstances, like those above mentioned, the plant sends forth a shoot possessing a diminished or feeble vitality, and therefore falls short of perfection; the product being *chess* or *false wheat*.

I conceive that Mr. Davidson's experiment sustains this idea, (which you observe implies neither a transmutation of the wheat seeds or wheat into chess, nor a separate origin for the chess,) and that in all probability there would have been no chess plants in his pan where the wheat seeds were placed, had they not been peculiarly subjected to the exposure of the elements by the experimenter.

Science has never yet answered the appeals of the farmer upon this mooted question as upon many others, but we hope the Scientific Committee with the help of the practical Mr. Davidson may next year be able to answer us, and say *positively* where chess comes from.

In concluding these remarks, I have only to say that I should be glad to see in the columns of the Cultivator, either argument or proof, from any person, that wheat sown in the fall does not under any circumstances produce chess. C. G. REED. Bethany, Wayne Co. Pa., Sept. 14, 1857.

The experiment alluded to was admitted by all parties at the time and place of trial, to *fail* in proving that wheat turns to chess, although the advocates of transmutation were "satisfied" that it did. To "satisfy" a credulous person is one thing, and to *prove* the fact is another.

We are not surprised that our correspondent "thinks" that the experiment "proved" transmutation; because those who adopt that opinion, are so easily "satisfied."

"Science," we think, has fully "answered the appeals of the farmer on this mooted question," by showing, first, that no plant ever passes generic boundaries as it would have to do in this case; by the fact, that there is never even *claimed* to be any *hybrid* between wheat and chess, as is always the case in crossing; by the fact, that although high premiums have been offered for a single plant (out of the billions that must be changing, if there is any change,) in a transition state, or part wheat and part chess, yet a single plant has never been produced; by the fact that a single cubic foot may contain *five million chess seeds*, and an acre of soil six inches deep might be made to contain *sixty million million seeds*,—and if only *one millionth* part of the soil were occupied by chess seeds, there would still be *sixty million* seed in one acre of soil,—showing that a great number may exist, enough to grow a heavy crop without detection. Science has also shown that chess plants, shaded under a growth of wheat, and not more than two or three inches high, will perfect and drop seed unperceived for another crop, while if unshaded (or where wheat has been winter killed,) a single plant will spring up several feet high and produce three to five thousand seed. *Practice* has also shown that in some countries, and in some regions of our country, as bad for winter killing as anywhere, where chess seeds have never been introduced, *no chess is ever produced*. Now these facts are sufficient—the proof of transmutation obviously rests on its advocates—they must *demonstrate* the truth of their hypothesis. This they have never done; but

have merely *assumed* an opinion, and brought facts, entirely inconclusive, to sustain it.

Precautions against the Pestilence and other Diseases among Cattle.

It is generally known, we presume, that there has recently prevailed, and still prevails, a disease of a most pestilential and fatal character among cattle in Prussia, Germany, and other parts of the continent of Europe; and that to prevent the extension of this disease to Great Britain, the Government of that country has prohibited the importation of cattle, hides, &c., from the infected districts. There are some who think that these protective measures, though highly proper, are not all that is required to protect the cattle of Great Britain or other countries against this most terribly destructive scourge of the bovine race, as the disease may be of an epidemic, as well as of a contagious nature. With every precaution against contagion, the disease, it is thought by some, may suddenly appear in England, or in this country; not necessarily imported from the affected districts, but like the first appearance of the Asiatic cholera, the outbreak may be sudden, and not directly traceable to contagion. The opinions as to the nature of the disease,—whether it appears occasionally in an epidemic form, and without chance for contagion, or whether it is propagated only by contact,—are as yet unsettled and conflicting. In this state of matters, while it would be unwise to get into any panic about the danger, it would be no more than what the most ordinary prudence would seem to require, if the owners of cattle should endeavor to guard against it, should it come either as an epidemic or by importation, by attending to the health of their stock, and especially by preventing the operation of those influences which are known to debilitate the general or constitutional vigor, and thus render the subjects of such influences more susceptible of that or any other disease. It seems, we say, no more than the dictate of ordinary prudence that owners of cattle should now study to protect them from all injurious and debilitating influences, and raise their condition to that of the most vigorous health.

Among the influences which are well known to affect the animal system injuriously, to lower the vigor and tone of the body, and expose to the mere ready attack of any disease whatever, the following are the more common, and more detrimental:—Exposures to fatigue, over-exertion, sudden changes of temperature, impure atmosphere in unventilated stables and elsewhere, insufficient or innutritious food, irregularity in feeding, and sudden changes from one kind of food to another.

Exposures to fatigue, insufficient food, and other of the foregoing influences incident to long journeys, are generally supposed to be the most common predisposing causes of the appearance of the disease—a pestilential form of murrain—in Austria and Southern Russia. In these countries cattle are often travelled to great distances for the purpose of being disposed of, and the disease often suddenly appears in the herd, particularly if the supply of water and grass proves poor or inadequate to the wants of the cattle while travelling. To prevent injurious influences from similar causes in this country, the comfort of animals driven or conveyed by railroad from one district to another should be carefully studied. The animals should not be crowded, nor shut up in close unventilated quarters; and they should be fed and watered with as much regularity as possible. Exposures to dampness, cold and wet, as well as to dust, are apt especially to produce diseases of the lungs and chest, and also of the digestive organs. Lying at night on the cold, damp ground, in a foggy atmosphere, after travelling all day

in heat and dust, is an exposure which cannot be free from injurious influences.

Cattle, even at home on the farm, are often exposed, injudiciously and unnecessarily, to the chilling influences of exposure during the night. They would certainly be more comfortable and more secure from the attacks of disease if housed later in the spring and earlier in the fall than is commonly practiced. This applies with especial force to cattle of the improved breeds.

Cattle often suffer from being turned out in the morning with empty stomachs, to eat grass loaded with dew, or covered with hoar-frost. A few mouthfuls of hay or a few handfuls of meal or oil-cake would prevent the suffering and loss caused in this way. All expenditures for oil-cake will be certainly covered by improvement in condition and dairy products.

Cattle are more susceptible of disease when debilitated by insufficient or innutritious food.

An impure atmosphere, caused by close, crowded, and unventilated stables is a frequent cause of disease. In Great Britain, dairies in large towns and cities are seldom free from a disease of the lungs caused in this way, which is very destructive.

If these predisposing causes of disease be carefully avoided, the pestilence need not be very seriously dreaded, and the condition of our cattle will certainly be improved.

Tile Draining.

MESSERS. EDITORS—Please inform your readers here, where tile drains are unknown, how the water penetrates the drain represented in your July number on the Maryland plan, so as to drain the ground along which it passes. It would seem to be no better than a solid pipe. How is the horse shoe tile laid—close to the earth, or raised so as to admit of an underflow?

Will any size less than five or six inches be worth laying down on wet upland? W. S. COWLES. *Norfolk, Ct.*

The closest joint that can be formed by two bricks or tiles simply laid together, will admit the entrance of all the water that can be carried off by the drain. Take for example, tubular tile two inches in diameter. There is a crevice between the ends of each, equal to a slit six inches long—and such a slit for every foot, for one hundred feet in length, will more than fill the bore with water in that distance—no matter how closely the joints may be made to fit by any ordinary way. Other tile would admit the water still more freely, if enough could ooze from the soil to fill these crevices.

The Horse-shoe tile with its flat sole, should be laid solid on the bottom of the ditch, so that there may be no channel of water underneath, as such a channel might occasionally find its way between the tiles into the main tube, and fill it with sediment.

Tubular tile, two inches in diameter, will often carry off all the water for a hundred rods or more in length, and inch and a half tile will do if the slope is considerable. Much depends on the descent—for example, if it be ten feet in a hundred, many times more water will flow off than if but one foot. Main channels, or those receiving many branches, must generally be larger. Every thing depends on the quantity of water to be drawn off, and the steepness of slope.

THE WISCONSIN FARMERS' AND MECHANICS' CLUB held its 3d Annual Fair at Whitewater, Sept. 15, 16. The show does not appear to have been very large; most of the cattle present being contributed by Walworth and Jackson counties, and the sheep by Rock county. The exhibition of Fruit, however, was good, the Wisconsin Fruit Growers' Association uniting to contribute in this department. The apples and plums are especially spoken of as making a beautiful display.



Perkins' Corn Husker.

We are pleased to give above an engraving, now for the first time presented to the public, of a machine which promises to accomplish what has long been a slow and tedious hand operation,—the successful and rapid Husking of Indian Corn. It combines equal simplicity in itself, and ingenuity on the part of the patentee, Mr. Perkins of West Killingley, Conn. The principle of the operation is merely to cut off the stalk and husk at the bottom of the ear by a pair of parallel chisels, the instantaneous separation of which pushes out the the ear, completely detached from every fibre of the husk. These chisels are shown in the engraving close together, as in the act of cutting off the cob just where the husk is attached. By a very ingenious contrivance they are then horizontally separated, with sufficient force to throw the ear off to the left and the husk to the right of the operator. The chisels then rise to the height of several inches and again come towards each other horizontally, and meet before beginning to descend. A single blow downwards, and the ear is laid bare, while the force expended in the operation is scarcely felt at all on the treadle.

We saw one of these machines at Emery Brothers' Warehouse, having another pair of knives opposite to those above represented, so that two hands can work at the same time, and double the amount be accomplished with scarcely any more labor to the one supplying the motive power. It will require some experience to work it, and some care to keep the fingers out, but perhaps little more than is requisite in using an ordinary hay cutter. So far as one is able to judge without trial in actual experience, we see no reason why this machine should not be as universally adopted as the Corn Sheller now is. It is made at present by a firm in Boston, and furnished, we believe, for about \$20. Emery Brothers expect soon to have it for sale here.

Poll Evil.

MESSRS. L. TUCKER & SON—Please favor me through your esteemed Country Gentleman, with a receipt to cure the Poll Evil on a horse of mine, which is a prevailing disease here in this territory, and much oblige, JAMES STEVENSON. *Clear Water, Minn.*

This is a difficult disease to cure, and hence there is much difference of opinion. It is commonly supposed to be caused by external injury,—by the horse striking his head against the roof of low stables, by tight curbing, producing hard pulling on the back of the neck,—by not currying that part of the neck well, and hence leaving the skin dirty there, &c. If taken early, stimulating poultices, as salt and vinegar, may dissipate it, in connection with light and unstimulating diet. If it suppurates, a large opening should be made low down, so as to allow a free flow of matter. The ulcer is usually treated with soap suds, or with pearlsh—*but we should prefer a solution of chloride of lime, not too strong, if the ulcer is foul and appears to need cleansing, but no longer. Dr. Dadd prefers tincture of iodine, injected by a syringe into the ulcer, and then applies a mixture of equal parts of salt and blood-root, held on by a cold water pad. This is repeated daily, after washing. The general health and proper condition of the bowels must be at the same time attended to.*

Farm Mill.

MESSRS. L. TUCKER & SON—After this delay, if a description of my Farm Mill is acceptable, here it is. It is called the "Excelsior Farm Mill," and manufactured by R. H. PEASE, Albany, N. Y.—price \$50—has a ribbed cylinder and concave—attached to horse power same as thresher—running with a belt—can be attached to any power, water, steam, or horse, either right or left hand—will grind all kinds of feed, including corn in the ear—will grind from 3 to 8 bushels per hour, according to dryness of grain and power applied, a two-horse power grinding nearly as fast again as one horse—has a hopper, and can be regulated to feed itself, according to power applied—is regulated to grind fine or coarse by thumb nut and screw. I have a preference for this over sweep mills, as it takes but little room, and can be applied to any power. D. D. FOOT. *Turin, N. Y.*

Watering Trees and Plants.

During the summer of 1819, Long Island was visited by one of the most severe and protracted drouths that I have ever known. The best cultivated corn gave only half the common yield, and in many places trees died in the woods in consequence of its severity. Being rather partial to cucumbers, I planted in one quarter of my corn field some twenty to thirty hills, about the first of May. Soon after the corn and cucumbers came up and began to grow, the dry weather set in. The cucumbers soon began to suffer, and I commenced watering; giving them three barrels full at a time, carted to the field once a week through the fruiting season. They grew luxuriantly, and produced an abundance of cucumbers throughout the entire drouth, which lasted until the equinoctial storm set in.

I have repeatedly tried the same weekly process of plentiful watering, on shade trees newly planted in naturally dry ground, and have always found it to be effectual. My practice has always been to water all plants standing in open ground plentifully, in preference to frequent light sprinklings, and I have never, to my recollection, been disappointed in its success. R. M. CONKLIN.

Saving Corn Fodder.

MESSRS. EDITORS—Having seen different modes of saving corn fodder in the Cultivator, I wish to give the readers of your paper my method.

I cut it down and let it lay until it wilts—then tie it up in small bundles, and if the weather is clear, I put three or four bundles together, and let them stand two or three days. Then put fifteen or twenty bundles together; then tie three or four bundles together with a grass band about the middle, with one or two more bands above the first, so that it will taper off to the top, and set this on the top of the large bunch, spreading out the stalks equally on all sides. Thus stooked, I let it remain for a month or more before hauling it to the barn. By this time the stalks are well cured, and there is no danger of their spoiling. When drawn to the barn, I pack them closely. I have followed this mode for twenty years, and have never lost a bunch since I adopted it, though I have sometimes tied up the corn as soon as it was cut. The greener the fodder the smaller the bundles should be. W. C. RANDOLPH Co., N. C.

Weaning Calves.

MESSRS. EDITORS—By reading a piece in your paper about feeding and weaning calves, I am induced to make some remarks in regard to my own experience.

This year I have fed five calves with half the labor and better success than I fed three last year. My plan is to let the calf be with the cow until the third day; then take it away, and commence feeding. Set the milk twenty four hours; then skim it. Then I take good hay and put it in a kettle and steep it well, until the liquid is of a dark color. This liquid is sweet, and a very natural nourishment. Add about one-half of this liquid or hay tea to half of milk. Pour the hay tea into the milk while warm, so as to heat the milk to the right temperature. The old process of heating milk is more apt to burn, and it will sour sooner. After two or three weeks, I feed them sour milk with the hay tea mixture occasionally. I feed them about eight quarts apiece three times a day, for about two weeks; then I think twice a day will answer. I find that calves fed in this way thrive better and are fatter, and are more hardy than when fed on new milk alone, or allowed to run with the cow, and it is also more profitable to the farmer. I made from four to five dollars a week from the five cows, by selling the milk. The nutritive qualities taken from the milk are supplied by the hay tea.

As cattle have become high and scarce, I think farmers should pay more attention to the rearing of young stock. A SUBSCRIBER. *South Salem, N. Y.*

THE HORSE SHOW AT SPRINGFIELD—at which we hoped to have been present, took place last week, and appears to have been remarkably well conducted, and successful in drawing out a fine display, as well as a multitude of visitors. The number of horses present, although not very large, is stated to have included a good representation of different breeds, and a greater proportion than usual of really valuable animals. We have not room before going to press to notice the exhibition in detail,—and hope to receive before next week a better account than can be made up from the materials now at command. The receipts were in the neighborhood of \$10,000. Among the most interesting incidents was the exhibition of a team of four horses by L. B. Brown, Esq., of New-York, one of them aged 29 and another 25,—still however as sprightly as many much younger horses under the ordinary usage and frequent abuse from which this noble animal suffers.

Downing's Fruit and Fruit Trees of America,

REVISED AND CORRECTED BY CHARLES DOWNING.

THIS work has been long and eagerly looked for by pomologists, and now that it has appeared we are not disappointed in its character. The first treatise—that of A. J. DOWNING—as all our readers know, was a work of great value—not so much on account of its originality, for the arrangement was an accurate copy of Kenrick and Lindley, and most of the fruits had been described in those works and in Hovey's Magazine, and the Catalogue of the London Horticultural Society; but the clear and pleasing style of the author, and the confidence which his reputation had inspired, made it just the book that was wanted. Of the two brothers, we always regarded CHARLES DOWNING as the more thorough and accurate pomologist and since the appearance of the work as first published, he has devoted a vast amount of labor and research in adding to his already extensive knowledge of the fruits of our country. All his additions, therefore, to the previous editions, render it now the most complete and valuable contribution to American Pomology, that has ever appeared.

Our readers may judge of the amount of these additions, when we state that while the first edition contained about *one hundred and seventy* descriptions of APPLES, the present has increased the number to more than *six hundred*, or nearly four times as great as at first. The number of PEARS has been augmented from *two hundred and thirty to five hundred and sixty*. Large additions have been made of other fruits. But it is not merely an increase in numbers that imparts value to the work; it is the great care and accuracy which mark every page, and the true character given to nearly every fruit in this large collection.

The arrangement of the more important fruits has been altered, discarding the separation into summer, autumn and winter varieties, and substituting divisions according to the excellence and value of the sorts. For example, among apples, there are 72 of those that are "well known, of excellent quality, and good habit;" over 400 of the second class; and over 120 rejected or superseded varieties. Dividing fruits in this way is very difficult in some instances, requiring a wide and accurate pomological knowledge; but the task has been generally performed with distinguished ability. There are a few instances in which many cultivators would vary this part of the arrangement; as for instance, in placing the Lady apple, Williams Favorite, Roman Stem, and Garden Royal, and such new varieties as Richards' Graft, Richmond, Evening Party, Fulton, and Wood's Sweet, in the first division, where "excellence, *well known* character, and good habit," are combined,—while the following are placed in the second class, viz: Benoni, Carolina Red June, (the most valuable summer apple at the west,) Danvers and Tallman Sweet, Late Strawberry, Dyer, Oldenburgh, Fallawater, Fall Orange, &c. Some of these are generally regarded as equal in quality to Rome Beauty, Green Sweet, and others of the first class. Among the PEARS, we observe Kirtland, Ott, Church, Boussock, Bloodgood, and Dix, in the first class; and Louise Bonne of Jersey, Duchess d'Angouleme, Glout Morceau, and Ananas d'Eté in the second. We think there would be a large vote among pomologists for arranging some of these differently.

We observe a very few statements from which perhaps we might differ—as for example, where we are informed that Hovey's Seedling strawberry "has *everywhere* proved superior for all general purposes, to any other large fruited kind"—where Burr's New Pine is termed only "medium" in size—where Peabody's strawberry is classed with the Hautbois, and in class-

ing Child's Supurb (grape) with American Sorts. The figure of the Ananas d'Eté pear, is not that of the variety generally known in this country by that name, which is accurately figured and described in the third volume of the Horticulturist. We do not find the Sapon apple described, nor the Early Barnard peach, one of the finest market sorts in western New-York. Red Cheek Pippin, a common synonym of Monmouth Pippin, is omitted, and "Rough and Ready" given as a synonym of the Primate,—a name never used, only given by an obscure and uninformed cultivator, and not worthy of being retained. These are about all the objectionable points we have observed, in a rather hasty examination of the pomological part of the work,—which, as a whole, we consider far more accurate than any work of the kind that has ever appeared in this country.

The First Part of the work,—treating on general management and cultivation, is very nearly as A. J. Downing left it, and does not contain the information now sought on the subject of pruning and training generally, and the management of dwarf trees in particular. On these subjects *Barry's Fruit Garden* will be indispensable to every cultivator who would understand the art thoroughly.

We observe that the error, that the failure of the Virgalieu pear in some districts is owing to exhaustion of the soil is still retained. Numerous instances have been cited where young trees, on *new soils*, have produced the same results. If, as we are told, the soil along the sea-coast fails to produce good fruit of some varieties, because it has been exhausted by long cultivation, why is it that the same sorts in parts of Europe that have been cultivated for so many centuries, attain such perfection?

The present edition is about one-fifth larger than the first, and contains 750 duodecimo pages, among which are 40 pages of index. The descriptions of the less valuable sorts have in many instances been condensed, and altogether the book constitutes a very compact and rich magazine of pomological knowledge, especially valuable to all who wish to investigate the character of the numerous varieties of fruit now in cultivation from American and European sources.

Cider, Champagne Wine, &c.

An inquirer in the Co. Gent. of Sept. 17th, wishes information in regard to the production of Champagne Wine from cider. I enclose the formula of an old manufacturer and dealer, (as may be found in the Am. E. Dispensatory, by J. King, M. D.) which has the reputation of being equal to the best foreign article:

Take of good cider 28 gallons,
4th proof brandy, 1 gallon,
Genuine Champagne Wine, 5 gallons,
New milk, 1 pint,
Bitartrate of potassa, $\frac{1}{2}$ a pound.

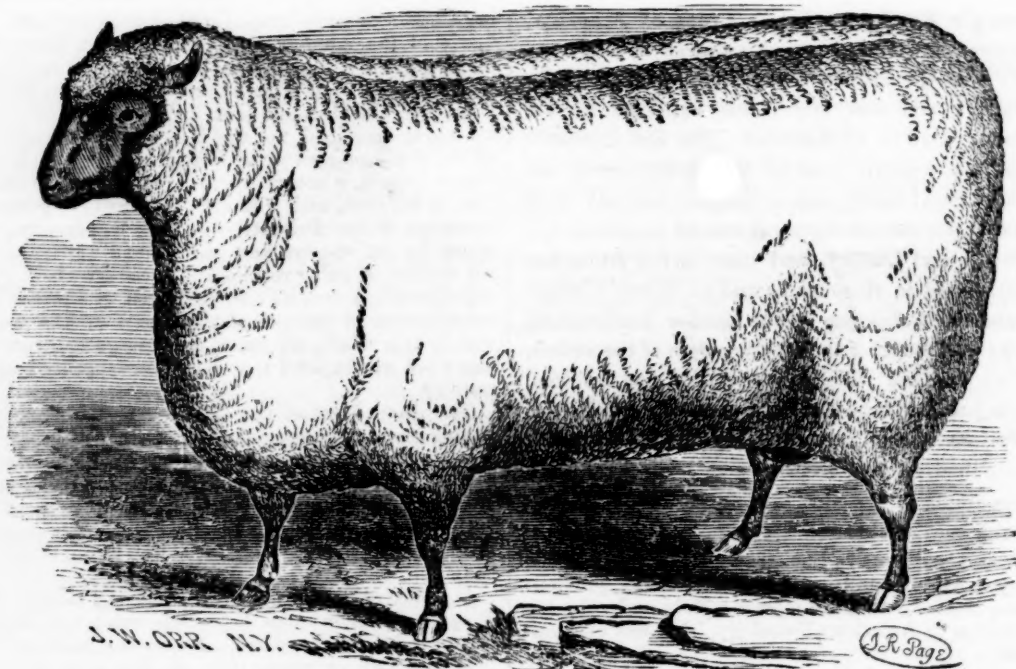
These are mixed together, allowed to stand for a time, and bottled while fermenting. Wire down the corks.

Clarified Cider.

Mix one quart each of lime and clean, dry ashes, and two quarts new milk. Pour these into a hogshhead of cider just from the press. In ten hours it is fit to rack.

Cider Wine and Champagne.

An excellent article may be made by adding three pounds sugar to each gallon of clarified cider, letting it stand three months to ferment. By bottling the above, and adding to each a small lump of sugar, a new fermentation will be excited. Wire down the corks and you will soon have fit for use, proper sparkling cider champagne. H.



South Down Ram "Frank,"

The property of, and imported by J. C. TAYLOR, *Holmdel, Monmouth Co., N. J.*

The above ram was selected by Mr. JONAS WEBB for Col. MORRIS of Mount Fordham, expressly to breed on the get of "Young York." At Col. Morris' great sale, in June, 1856, this sheep was in England, and was the property of Mr. M. Mr. M. transferred him to Mr. Taylor, who imported him, together with a lot of five ewes, and they arrived in October of the same year, in time to breed him to his entire flock, and he has now some thirty head of increase from him.

"Frank" was winner of the first prize in his class at the Monmouth County Show, held at Freehold—also the first prize of his age at the New-Jersey State Show, held at New-Brunswick, 1857.

The State Fair at Buffalo.

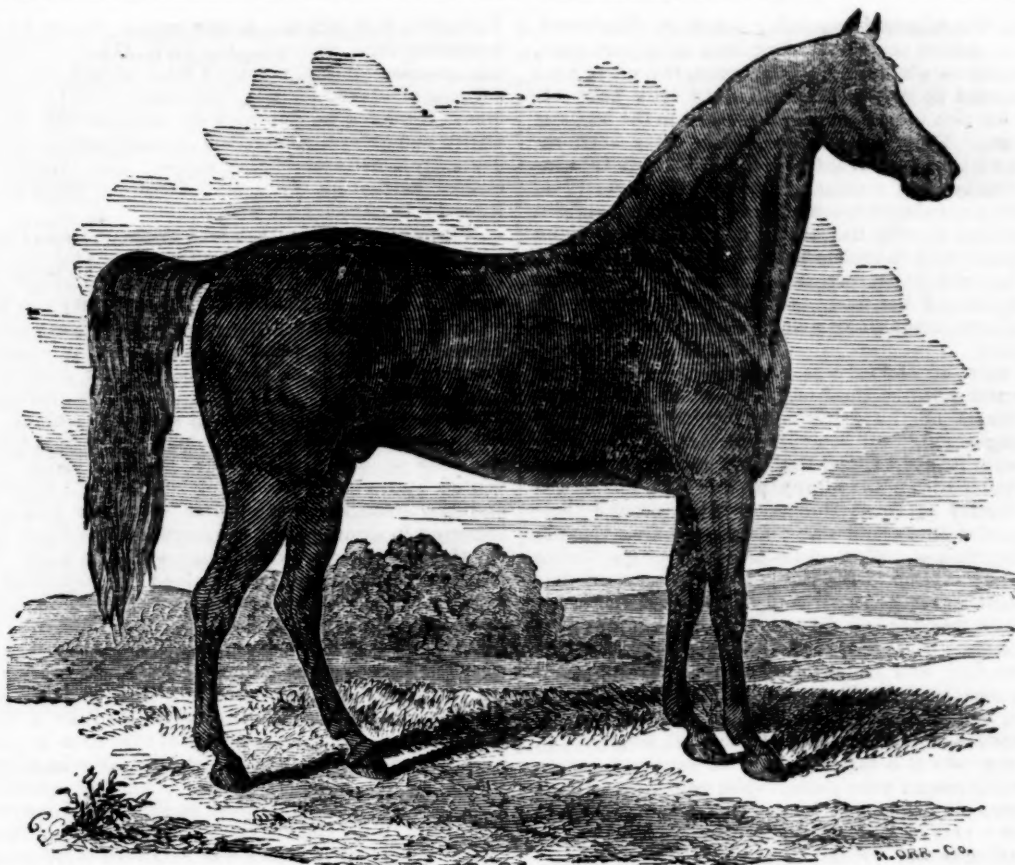
With a bright sun and clear air, grounds and roads neither too wet nor too dry, and the temperature at the best and pleasantest medium—it would have been strange indeed, if last week had not witnessed a large attendance at our State Society's Buffalo show. In some respects a superior exhibition, as a whole it compares favorably with any of its predecessors. The receipts from visitors were about \$15,000—the number of tickets sold having probably never been exceeded except at Rochester, where the price of admission was at half the present rates, and it consequently required a greater multitude to make up a somewhat smaller sum.

THE GROUNDS AND BUILDINGS,

If we mistake not, were of somewhat less extent than has usually been the case. The former were large enough, but the crowd proved rather too great for comfortable sight-seeing in the erections devoted to domestic manufactures, the mechanic and fine arts, fruits, &c. Had a small sum been expended in diminishing their exterior roughness—such as in extending the eaves of the buildings a foot or two, and in various other little ways, their appearance might have been rendered more tasteful and appropriate, and we should not have thought the money wasted. But altogether there was very little to complain of. The beautiful situation was the theme of universal conversation, commanding so fine a water prospect, and including a number of views from several points, of which we should be glad to present engravings if time and space would have permitted.

THE EXHIBITION OF STOCK.

The Show of *Short Horns*, was not a large one. It included, however, fewer inferior animals in proportion to its numbers, than usual. J. O. SHELDON, Esq., of Geneva, showed a very select lot of females, noticed in our columns some months since, and now vindicating all that was said of their excellence by the premiums they received—first prizes being awarded two—one "imported" and the other a "three year old," and first and second prizes respectively to two others in the class of "two year olds." As we believe the *Aldernys* shown by Mr. S. were the only ones on the ground, we mention here that neither of his four beautiful samples of the breed would have had reason to fear competition. "Echo of Oxford," the Short Horn bull shown by E. MARKS of Camillus, added a blue ribbon to his previous well earned laurels, and the cows "Bloom 2d," and "Miss Belleville," (imported) attracted the attention they merited. W. M. BULLOCK, of Bethlehem, exhibited his bull "Prince of Wales," and a promising bull calf. C. P. WOOD, Auburn, showed a good collection, including the bulls "Cornplanter" and "Double Duke," the cow "Regatta," and three heifer calves—two of them twins and very pretty. W. HURST, Albany, showed the bulls "Balconi" and "Damon," and four heifers of different ages. C. K. WARD, Leroy, showed several head of nice young cattle, and Messrs. PATRICK, HUNGERFORD & BRODIE, Rural Hill, Jefferson Co., their fine imported cow "Empress Josephine." Among other exhibitors we noticed the names of T. GOULD, Aurora, (we believe not for competition,) J. S. Wadsworth, Geneseo, H. P. Reade, Hamilton, Van Valkenburgh & Mack, Lockport, J. R. Calkins and E. H. Freeman, Erie Co., E. Fellows, Chili, Monroe Co., & S. A. Winston, Bristol, Ontario Co. There were a few exhibitors of this breed from Canada—among whom were W. Miller, D. Campbell, J. Robinson, R. Currie, J. Patty, J. Taylor, and others. F. H. North,



Morgan Horse Paul Clifford.

This horse received the first premium in his class at the National Fair at Springfield, Mass., in 1854. He was foaled in 1843—sire, Black Hawk.

from Conn., and Peter Stutts from Ohio, we believe are the only gentlemen from other States contributing to this department.

Devons turned out in larger numbers than any other breed,—presenting a finer show in this respect than ever before, and perhaps we may add, never excelled in the average of merit they possessed throughout. Capt. HILTON, New-Scotland, had three head on exhibition, each of which was awarded a blue ribbon. L. F. ALLEN, Black Rock, made nearly twenty entries. E. G. COOK, Rural Hill, Jefferson Co., exhibited a good collection. STANTON & JOHNSON, Ellicottville, E. C. BLISS, Westfield, A. STEVENS, Genesee Co., ENOCH OTTLEY, Phelps, E. P. BECK, Wyoming Co., D. G. GREGORY, Orleans Co., J. W. HAMLIN, Erie Co., S. BURTIS and G. C. MOORE, Phelps, O. HOWLAND, Auburn, A. WOODRUFF, Schuylerville, and a number of others whose stock we have not room to mention in detail, showed either single animals or several head—all of more than average merit. A very fine display of this breed was contributed by Wm. H. LOCK of Yarmouth, C. W., whose enterprise in exhibiting, as well as breeding, is deserving of high commendation.

In *Herefords*, there has probably never been a larger or handsomer display in this country. Such shows are of far greater value in attracting public attention to the real deserts of this breed than much discussion. The merits of such stock as that exhibited by M. C. REMINGTON, Sennett, A. & H. BOWEN, jr., Medina, E. CORNING, Jr., Albany, GEO. CLARKE, East Springfield, go farther than many words. A number of recently imported animals are calculated to be of service to the stock in this country. There must have been from forty to fifty head shown altogether.

Ayrshires were few in number, but by no means poor in character. Of the three head shown by PATRICK,

HUNGERFORD & BRODIE, one may be pronounced an almost perfect model of a milch cow, and the others were scarcely her inferiors. O. HOWLAND, of Auburn, was the owner of the prize bull, also a fine animal.

Working Oxen were not present in very large numbers. The excellent yoke of Capt. HILTON took the first prize, and others (including steers) owned by H. DIXON, East Bethany, M. SALISBURY, Ellisburgh, T. LEGGETT and M. ROBERTS, Henrietta, A. H. BOWEN, Jr., Medina, O. HOWLAND, Auburn, were well matched and broken. *Fat Cattle* were a good show—J. S. WADSWORTH of Genesee, being the largest exhibitor. Among others were W. F. BAKER, Henrietta, O. HOWLAND, Auburn, THOS. KIMBER, Syracuse, &c. One heifer, the ownership of which we have forgotten, was most astonishing for size and fat, and several of the steers were unusually fine.

We ought not to omit mention of the *Short-Horns* imported by THOMAS BETTS. They included several females of rare excellence, and were held at prices surprising to hear in the present condition of individual and public finances. One of them was the fattest two year old heifer we ever saw, and was rounded out nearly to the ideal of Durham perfection.

There were one or two head of *Galloways* exhibited, a black polled breed, as our readers are aware, apparently having much to recommend it, where better kinds cannot be made to prosper. A pair of small, stunted cattle, one a 6-year-old cow, and the other a heifer 3 years old, attracted considerable attention, and were generally looked upon in the light of *dwarfs*. We were informed, however, that they were the genuine *Kerry* breed, as it is found in the mountainous parts of Ireland, running wherever a goat can go, and subsisting on about as little and as coarse a kind of nutriment. Our informant was from that part of the

country, where he had frequently met them. The breed, however, is seen comparatively rarely in its pure state, even there, as what generally go under this name have been crossed upon larger breeds, until they have attained the size we see them represented in the books as possessing. Those on exhibition would have been regarded with additional interest if they had been considered as types of a class on which the peasantry of forbidding and almost inaccessible acclivities are obliged to depend to a great degree for means of prolonging life. Their milk is said to be of excellent quality, and great in yield, in proportion to the size of the cow and the character of her food. We understood that two or three quarts, three times a day, was not an extraordinary yield.

The show of *Horses* was considered by competent judges not quite so good or extensive as some other departments of the exhibition. Under the class of "thorough-bred," the committee report that no pedigrees were furnished, and that they could not, according to instructions, award any premiums. There was a fair display of Draft Horses, of Morgans and their crosses, of stallions, and a number present from Canada and other States. We could not venture to specify the meritorious, except at the risk of injustice to many that we did not have the opportunity of seeing, and as we shall hereafter publish the awards of premiums it is unnecessary. E. C. Bliss of Chautauque Co., exhibited a fine *Jack*, and Mules were shown by the same gentleman and by L. I. Waters and John Coatsworth of Buffalo, and P. Danforth of Cayuga Co. A fine display was made by the horses of the Am. Express Co., which turned out a large number of excellent teams. The young people were pleased with two or three pairs of ponies,—in connection with which we may perhaps mention a pair of handsome dogs before a little wagon, well matched and broken to harness, and fearlessly driven over all parts of the ground.

The *Sheep* on the grounds constituted a pretty good representation of the different classes of Long, Middle and Fine Woolled—including an excellent show of Leicesters by Patrick, Hungerford & Brodie; very superior South Downs by E. Corning, Jr., Saml. Thorne, Thos. Betts, and L. F. Allen; Spanish Merinos by T. C. Peters, O. Howland, R. Burritt, and J. Haswell; Silesians by W. Chamberlain; French by J. D. Patterson of Westfield; Saxons by O. Howland, while numerous other exhibitors also showed good animals in nearly all the classes mentioned. Cross breeds of fine and coarse wool were shown by E. G. Cook, S. H. Winslow, D. J. Lee, O. Howland, R. Baker, A. Riggs, A. & H. Bowen, and others. The contributions from out of the State included Long Woolled from Geo. Miller, Markham, C. W., Silesians from W. H. Ladd, Ohio, Merinos from E. Porter, Rutland, and E. Rich, Sudbury, Vt., and Middle Woolled from A. Spencer, Whitby, C. W.

The turn-out of *Swine* was small. There were, however, several choice lots. E. C. Bliss of Westfield, B. S. Carpenter of Elmira, E. S. Hayward of Rochester, and C. E. West and W. Granger of Buffalo, contributed creditably to the pens of small breeds, and Messrs. West, Murphy, Riter and Hayden of Buffalo, and Bennett of Cheektowaga to the large breeds. Mr. Bliss made an excellent and quite extensive display.

We have not room for more than a very brief notice of the *Poultry*. There was quite a large number of fine birds shown—some of the best of them by D. S. Heffron of Utica, E. S. Ralph of Buffalo, E. G. Cook of Rural Hill, and E. A. Wendell and W. R. Hills of this city. In Turkeys, Ducks and Geese, we also noticed the contributions of L. F. Allen and O. Howland.

THE MACHINES AND IMPLEMENTS.

The collection of *Mowers and Reapers* was respectable, but not extensive, and consisted mostly of those which were tried the past summer at Syracuse, among which we observed Kirby's, Wood's, Ketchum's, Allen's, Heath's, Warder & Co.'s, Ball & Altman's,

Forbush's, and others. A new mower, or one we had not before seen, was exhibited by W. GAGE of Buffalo, the inventor—it had not been tried at any exhibition nor manufactured for sale, its inventor not having the means for doing so, but we were pleased with its simplicity and several good points in construction, and it is evidently worthy of further notice. The inventor informed us that he could manufacture it for \$28, and it might be retailed for \$75.

WINEGAR's lever gate, which opens and shuts easily without winding a weight, by the slight pressure of a lever without moving from the saddle or carriage seat, attracted much attention; and its durability was proved by its constant use by spectators during the several days of the fair. HORACE L. EMERY was of course on the grounds, with his various admirably constructed machines, namely, railway horse-powers, thrashers, and separators, cider-mills, and sawing machines. The cider press is improved to prevent the side-strain on the screw occasioned by unequal pressure, which is prevented by three screws acting at once and together; and the strength of the grater was fully proved by throwing in stones, which were scratched and torn without the slightest apparent damage to the work. The cross-cut saw machine has received one important improvement, so that the saw works with equal force both ways whether by thrusting or drawing, and cuts with great rapidity. E. D. HALLOCK of Rochester, exhibited a fine portable saw mill, which at one operation will slit, cut logs, and bore or drill. The portable grain mill "Young America," from J. B. WRIGHT & Co. of Westfield, N. Y., was in successful operation in grinding corn for feed; and Westinghouse's and Pitt's thrashers did excellent work before the spectators. Dederick's Vertical Hay press, and Birdsall's new clover mill, from West Henrietta, N. Y., were on exhibition.

The collection of *plows* was small—a large number were however exhibited by C. R. BRINKERHOFF of Batavia. Among them was a new subsoiler, consisting of a share following in the furrow of the common plow and connected with it, and running ten inches deeper, and loosening the soil to that additional depth, and like the common subsoil plow, not turning it up to the surface. It is of large size, and requires a triple team to draw it in performing thorough work. A revolving, spirally cut cone, is attached to the front of the cutter immediately beneath the beam, and prevents clogging. The plow is kept steady by means of two wheels, the larger one passing in the previous furrow. It is claimed to require no holding, and to be managed by a boy in turning at the ends of the field. The price of the whole is \$32, which is much too high—its merits, which appear to be considerable, require further trial to establish. The same exhibitor had one of Cottan & Hallam's dynamometers, with oil piston regulator, made in London—a valuable measurer, price \$40. A side-hill plow, an improvement on Barnaby & Moore's, well known for many years, was exhibited by A. BARTON of Syracuse. The improvement consists of a steel point, turning on the forward part of the cast-iron mold board, and keeping always in a line with the beam. There were some other side-hill plows, but none that appeared worthy of special notice.

The several halls devoted to the exhibition of machinery, tools, household furniture, articles of domestic manufacture, &c., were densely filled with many hundreds of interesting objects, which our limits forbid enumerating, even in a general way. We cannot, however, omit noticing ATWATER's fifteen dollar sewing machine, which is certainly a remarkable invention, both for its simplicity and ingenuity, and it appears to possess all the durability and efficacy claimed for it. The fine assortment of farming tools from TOWNSEND & Co., of Westfield, Chautauque Co., were well worthy of commendation for their beauty and perfection of finish.

Among the few Fanning-mills, a simple contrivance for imparting motion to the sieves was observed in the one presented by E. TAYLOR of Waterloo, N. Y. The

connecting rod or pitman, is attached immediately to the sieves, and moves them backwards and forwards, instead of sideways as usual. We observed a good collection of straw cutters, corn-shellers, churns, mowing machines, &c., from the Buffalo Agricultural Works.

Page's Perpetual Lime Kiln, erected on the ground, continued in operation during the fair. The stone is put in at the top and taken out at the bottom once every three hours. A cord of wood is claimed to burn a hundred bushels of lime.

There were several corn-planters on the ground, of various objects and pretensions, several of them of considerable merit, but want of space prevents us from giving a particular description of them.

Several scrapers or excavators were exhibited, which were mostly new. That of C. BLAKESLEE, of Ashtabula, Ohio, is used without turning over, the earth merely dropping at the bottom, which may be raised to any required height, so as to distribute it as desired, and require no levelling. Its cheapness (about \$8,) is in its favor. Another excavator, patented by J. F. WILEY & Co., is a larger and more complex machine, and is used to convey earth to considerable distances. Two scrapers are filled alternately, and the earth drops through the bottom when they are unloaded, by opening like the slats of a rolling blind. It is said this machine has been used on one of the western railroads for grading, and has saved two-thirds of the labor. It cuts out and carries a cubic yard of earth at one operation, and is worked by two horses.

Molasses from the Chinese Sugar Cane.

MESSRS. TUCKER & SON—Having just finished the making of syrup from the Chinese Sugar Cane, I would like to make it known through the Country Gentleman. We procured a mill with vertical iron rollers, at an expense of about \$30—such an one as R. Peters used. The first trial of syrup making was on Sept. 15th, the seed heads having just made their appearance—375 average canes gave 100 quarts of juice—which, when boiled down, made ten quarts of syrup. I made the second trial Oct. 3d. The seed heads by this time had begun to turn brown. I crushed the cane from one-eighth of an acre—got one hundred and thirty one gallons of juice, which when boiled down, gave twenty-six gallons of syrup like the sample I send you. I put nothing in to clarify it but about a teaspoonful of pearl ash to a barrel of the juice, when about half boiled down, and kept it well skimmed. When it is boiled down we simmer it through flannel. You will see by this, that the riper the cane the more syrup it will produce. We think that the Sugar Cane will prove a profitable crop in an ordinary season. We could not expect a fair trial of it this summer, on account of the cool weather. A. N. HOUSE, Chester, Orange Co., N. Y.

The syrup sent us by Mr. House is superior to any we have before seen,—decidedly preferable to the common molasses from the stores.

MESSRS. EDITORS—I know not but that you may be troubled with too many reports of this *stranger* on our soil. If so, you may cull, and lay those not wanted under the table.

In August, I reported through your paper, that my cane was too big for Mr. Lester's calves; that it was 12 feet high. The highest stalk which I measured, was 13½ feet. The seed has ripened, and I have cut and ground and boiled it into syrup. It is the same little patch which you saw my men hoeing when you were here in June—then little puny stuff. This patch was one-fifth of an acre; from which I have made 51½ gallons of good syrup; equal to the best sugar-house molasses, or second rate golden syrup. I cut it, took off the tops and leaves, and ground it in a wooden mill, similar to a cider mill, and boiled it in sheet iron pans. I need not go into the particulars of the mode of operation, for that is given to every body already.

But I will here say that I did not make my mill strong enough—it broke and gave me some trouble, and I think that one-fifth of the juice was left in the stalks. The mill should be equally as large and as strong as a cider mill.

But my object in this communication is to assure my fellow-farmers that this last "humbug" is no humbug. This syrup or molasses has become a commodity upon my table as regular as butter. At tea this evening, we had warm gingerbread and other sweet cake made with it. It is superior to any ordinary molasses—second only to the best of maple—a clear golden color, a delicious, wholesome, nutritious article for the table. I have carried it to market and it brings one dollar per gallon.

Now this is a fixed fact, that the *China Sugar Cane Molasses* has become a staple product of my farm, and a very profitable one at \$1. It can be afforded at two-thirds or one-half the cost of a bushel of wheat. I have got one acre on my prairie farm, which I to-day have begun to cut; it having been planted the last of May, (three weeks later than this by my house,) the seed is just beginning to ripen. It takes it ten days or two weeks longer to ripen than it does our large Dent corn. I suppose this will yield 200 gallons of syrup. Within 20 miles of Muscatine I have heard of 65 acres, which will probably make 13,000 gallons. Caution, farmers! How many acres in each county will it take to supply it with molasses?

The great sugar refinery at St. Louis has made sugar from this same kind of molasses this year.

I predict that our sugar will be made from this article by large sugar houses in each of the principal towns, and we shall take our barrel of molasses to market the same as we now do wheat; but remember a far less quantity will supply the demand.

It may be thought that the Middle and Eastern States cannot raise this Sugar Cane to so good advantage as our rich corn lands of the West. Four-fifths of the cost of this syrup is *labor in manufacturing*. All such manufacturing is done cheaper at the east. SUEL FOSTER, Fountain Hills, Muscatine, Iowa, Oct. 3.

When we saw Mr. FOSTER's sugar cane patch on the 10th of June last, it was from one to two inches high, of a light yellow color, and most unpromising appearance, and we little anticipated so favorable a report from it as is given above. Knowing Mr. Foster's reliability, and the qualification of himself and family to decide as to the quality of the syrup produced, we look on his statement as affording the best evidence which has come to our notice, of the value of the Chinese sugar cane as a syrup-producing plant for the middle and perhaps the northern States. We hope he will send us a full account of the manufacture and product of the acre of sugar cane to which he alludes.

MESSRS. EDITORS—I have been experimenting with the Chinese sugar cane, but I am not entirely satisfied with my experiment. I deem it anything but a perfect trial. My rollers gave out, and I had to resort to other means against my will. My corn was cut, and had to be worked up without delay, or else they would spoil. I put it through the following process: I cut 69 stalks into short pieces, and boiled them in spring water to extract the juice, but you may know that I did not get the half of it, as I had nothing in the shape of a press to press the stalks after boiling. I had about six gallons of water in the beginning, and when I drained it off the stalks I had about four gallons, which I put on to boil down to syrup, and I was agreeably surprised to find, when I got the water evaporated, that I had some little over a quart of syrup or molasses, and that of a quality inferior to none that I find in the country stores—I will not except Tawling's syrup, which is a first class molasses, and sells from ninety cents to a dollar per gallon.

I believe a man with a pair of cast-iron rollers, hung in an iron frame and geared together at one end by cog-wheels, with a good heavy balance or fly-wheel on

one side, and a crank on the other—put up similar to a Yankee self-sharpening straw and fodder cutter—could press out juice and make syrup enough for his own family use, and that too at a cost of from 12 to 20 cents a gallon. All it needs is boiling in a brass or copper kettle, adding about a teaspoonful of quick or caustic lime to every four gallons of juice, to clarify it and neutralize the acid—a piece of fat pork, about two inches square and half an inch thick, will have the same effect.

I want to put up a mill this winter, which I think I can do out of wood, which by man-power will press out an acre in a reasonable length of time, that will not cost me five dollars in laid out money, as I am a carpenter and can do the work myself in odd times through the winter. HOWARD WILLIAMSON. *Willistown, Chester Co., Pa., Oct. 3, 1857.*

Farming in New Hampshire.

During the week ending the 3d inst., (Oct.) we made an agricultural excursion through a portion of the Merrimack river valley, N. H., visiting a great number of good farms; making particular inquiries respecting the crops of the present season, and in examining them in reference to their general farm management, culture, &c. We were highly gratified in noticing the great agricultural improvements that have been made in this section of the old Granite State within the past fifteen years. Most of the farm houses at which we called, whether they were the large double house, or the more cozy looking cottage, were all built in the most durable manner, and finished and furnished in a style bespeaking the wealth and taste of their owners, and a thrift and independence, not generally to be found in the cities at this time. But the desire for good substantial barns, has kept pace with that for good houses. Every farm we visited, with the exception of two, had cellars under them; many of them had walls of split granite laid up as regularly and handsomely as are the undrest granite stores and churches of the city. The cows kept on many of the farms, ranged from eight to eighteen in number, and in nearly every instance they are kept in the hovel at night through the year. Muck and other absorbents are used to mix with the droppings of stock. Since this plan has been pursued, many of the farmers think the quantity and value of their summer made manure has been quadrupled, and the heavy growth of aftermath or second crop of grass, in their fields, fully corroborates the correctness of their opinions.

The crops on thousands of acres of now cultivated lands that we saw, might, with proper drainage be readily doubled. Many farmers have commenced the good work, and doubtless, a very few years hence, underdraining will become one of the fixed institutions of the New Hampshire farmers. We examined many fields of large and fully ripened corn, as good as is raised any year, and we saw also other fields of large well-grown corn, that were as green on Tuesday, 29th Sept., as they were in July—(the corn in the milk.) The next morning a "frost and a freeze," had nearly ruined these fields as far as the crop of corn was concerned. Had the land upon which these late crops of corn were grown, been thoroughly underdrained, the result would probably have been from 60 to 80 bushels of sound corn instead of that amount of pig corn. We saw in Hollis, a field of three acres of thoroughly ripened *Brown corn*; it was large and evenly grown. A few days previous, a committee of the County Society examined it, it being entered for premium. They selected one square rod, husking and measuring it in the field; there was five pecks, good measure, and yielding 200 bushels of ears per acre. After making all proper allowance for shrinkage, we put the crop

down at from 75 to 80 bushels per acre of shelled corn, say next January. But we are happy to state that we saw several fields that were thought to yield a larger amount. One field of two acres produced about eight good ears to every five stalks—we never before saw a field producing so large a number of twin-bearing stalks. Up to the middle of August, the potato fields promised an unusual crop, but the rust pretty generally prevailed, and the result is less than an average crop; but the rot is not at all prevalent. We put the question to dozens of farmers, "Do your potatoes rot this year?" The reply was, "none to speak of."

The Phin, couch or witch grass, abounds upon many of the farms. To see the ground of many cornfields as green as a lawn, from the abundance of this kind of grass, looked to us as slovenly farming; but several farmers assured us they would on no account have it eradicated from their farms. They say on their stocked down grass lands it does not materially interfere with the clover, herds grass, &c., but after these have disappeared, the Phin will give a heavy yield of the very best kind of hay for several years.

Much attention is given to the growing of green food for milch cows during the summer, especially by those farmers that sell milk. Southern corn, sown in drills, is mostly used for this purpose. We saw on the highly cultivated farm of NATHL. WHITE of Concord, a most luxuriant patch of about one-third of an acre—a portion of it had been cut. The week previous to our seeing it, the farm was visited by J. O. ADAMS, Secretary of the New Hampshire State Ag. Society, and other gentlemen. While there they had a portion of the ground measured, and the fodder cut and weighed. As they figured it out, there was grown on the third of an acre sixty tons—or at the rate of one hundred and eighty tons of green fodder per acre. We saw a patch of sugar cane. The owner had cut and weighed a certain average square. This yielded 33 tons per acre; but we saw larger grown cane than the above named. At one or two places we tested samples of the cane syrup, but think but little of the cane here has sufficiently matured to make a first rate syrup. The hay crop was extra; spring wheat generally light—injured by the weevil, rust, &c. Some few farmers have raised fair crops of winter wheat.

At many farm-houses we were treated with domestic wines, generally that made from currants, and in most instances the wine was of superior quality. At one farm-house we partook of some superior grape wine manufactured from the domestic grape—the worthy old farmer assuring us that it was the pure juice of the grape, having neither strychnine or any other poisonous ingredient in its composition. We think it would be well for farmers generally, to cultivate more extensively the currant and the grape for the manufacture of domestic wines for family use.

The fruit crop is very light. In a few instances we saw a fair crop of apples, and in one or two places a tolerable crop of peaches—enough to explode the statement that when the mercury falls to 12° or 14° below zero, the cold will kill the blossom buds of the peach. In most parts of this State, the mercury the past winter sunk from 30° to below the freezing point of mercury, and yet the peach buds in many localities survived, and we have freely partaken of New-Hampshire peaches the past week.

We took a ride over a portion of the extensive farm in Franklin, formerly owned by the late Mr. WEBSTER. For this section of the country it is a large farm, containing some eight or nine hundred acres. Mr. TATE, its present owner, appears to be an enterprising, energetic man, well fitted to manage such an estate. Since it has been in his occupancy, he has nearly quadrupled the amount of hay and stock upon the place. He has twenty-one acres of corn, that will probably yield fifty bushels per acre, and other farm crops to correspond. A heavy rain, and want of time, prevented our examination from being as thorough as we could have

wished. Several of the rooms in the house, and the furniture, pictures, &c., remain as left by the great statesman. Mr. Tate has promised us a written statement of the farm, its products, improvements, &c., since it came into his hands, and we may perhaps refer to it again.

By drainage, irrigation, manuring, and labor skillfully applied, the farm products of this State could be quadrupled in a very few years.

In the vicinity of the manufacturing places, many farmers are in the practice of selling large quantities of hay, yet these farms are annually improving, without the purchase of manures to any great extent. The muck beds, barn cellars, the tying up of their cows and some other of their stock in hovels the year round, and skill in collecting other materials for enriching their grounds, solves all mystery in this matter. —

Sewing Machines for the Family.

MESSRS. EDITORS—In a late number of the "Co. Gent." was an inquiry respecting "Sewing Machines." Whether the query has been answered, I know not. Said "Gentleman" not calling upon me with accustomed regularity during my eastern peregrinations, I am not so well informed of his views and opinions as when receiving his weekly visits quietly in my western cottage.

But to come to the point. I have been investigating the subject of sewing machines as a hoped-for relief to our western farmer housewives. Perhaps my conclusions may not come amiss to my Eastern sisters.

I gathered my information not from the sale-rooms of the articles in question, but from the experience and observation of those who are familiar with the subject, and could vouch for their utility and excellence. Profiting by this information, and after due practice upon one of "WHEELER & WILSON'S" machines, I have ordered one sent to my western home. I fancy I shall have only to fix the work, and my boys as well as girls will in turn claim the fun of "plying the shining shaft."



Medium, on Plain Table. Price, \$100.

This machine is simple—the use and arrangement of the different parts readily understood upon examination or explanation. The moving of the foot pedals is neither fatiguing or disagreeable, and the slight click, as it makes its 1500 stitches per minute, not annoying to the nerves of hearing. By practice and the use of a little invention, one is surprised agreeably in being able to perform much more of the various kinds of family sewing than even at first anticipated. The ease with which that heavy burden of household sewing is thus expedited, is perfectly felicitous to think of.

The price of the machines of all the reliable manufactures, is considered by many objectionable. I would only say, from the knowledge I have gained, although I had the offer of a \$10 machine as a gift, I preferred to purchase one of "Wheeler & Wilson's."

The great saving of time and strength by the use of one of these machines, may be agreeably and healthfully, as well as remuneratively employed in other occupations. The riddance of that extra member of the family, the seamstress, whose stranger presence would be considered, to say the least, superfluous, were it not an absolute necessity, may be set down in the "Cr." when considering the price of a sewing machine.

Much as I love my needle, the necessity of its constant use is burdensome. I should be glad to see all our women relieved from the drudgery which sewing becomes when a numerous family claim their constant stitchery. It is this wish which has induced me to indite this epistle. ELSIE. New-York, Oct. 8.

Edward Everett's Address at Buffalo.

MR. EVERETT began by alluding to the peculiar position of the present locality of the fair—its proximity to the dominions of the British Government—its connection with the great chain of lakes, and the cataract of Niagara—and of the great artificial link between the two nations, the suspension bridge. He next proceeded to allude to the connection between the various pursuits of civilized society; and after remarking that orators on every great public occasion, generally claimed for the particular pursuit on which they were speaking, pre-eminence above all others, could not fail to admit that agriculture was unquestionably the most important of all. In proof of this opinion, he stated that if only eight or ten articles of agricultural product were withheld from the human race for only ten days, the whole would perish in the most agonizing forms of dissolution. To enable the mind to conceive at a glance, the amount of human food of agricultural production, he stated that the human family would fill five tables, very compactly seated, extending five times around the globe, and that these tables would require replenishing two or three times a day. After speaking of the connection of agriculture with various sciences, he cited several interesting instances where irrigation and other modes of fertilizing had proved of the highest benefit. In the course of his remarks, his recollection of his subject seemed to fail him, and referring to his notes he humorously remarked that he was compelled to do as financial men had to in these hard times, "trust a little to paper."

He took a most interesting and sublime view of the great laboratory of nature, every where going on in connection with the culture of the soil and the growth of plants, worthy of the attention of the farmer, not only on account of its dependance on profit and skill, but on the enlargement of the human mind. Many interesting anecdotes were related in regard to the early introduction of various plants of agriculture and commerce—and the economy of the various processes in the growth of plants, and in the habits of animals, and the immense improvement effected by means of agricultural machinery, were dwelt on at some length. Passing from these subjects, and the quiet and manly pursuits of the farm, he administered a most eloquent and withering rebuke to the gambling of stock-jobbers in the cities—eulogised the practice of some of the most powerful monarchs of ancient and modern times, in taking daily exercise in cultivating the soil, and in rigid habits of temperance, in connection with which many interesting historical facts were stated. He closed his remarks with an eloquent appeal to the beauty, the glory, the miraculous operations at all times going on in nature, as an overwhelming proof of the power of the Deity, and of the truth of miracles, which produced a most thrilling effect on the great audience assembled on the occasion. The address, which appeared to be chiefly extemporaneous, was two hours in length—too long for a standing audience—but listened to all that time with deep attention by all in attendance, which his surpassing eloquence could not fail to produce.

Inquiries and Answers.

CLARIFYING WINE.—Will you have the goodness to inform me through the columns of the Co. Gent., the most approved mode of clarifying wine made from the Isabella grape? I have heretofore found it difficult to thoroughly clarify my wine. O. H. W. [Will some of our readers who have had the necessary experience, answer the above?]

RICE HULLERS.—Among the numerous and valuable inventions of the day, is there any machine that can be relied on, for cleansing rice? It is a crop which can be easily and profitably grown in this section of country, but few raise enough even for family use, on account of the great difficulty of getting it prepared for the table. If there is any such machine, can you give me through the Country Gentleman such information respecting it as to its size, weight, price, capabilities of work under one or two horse power, &c., as may enable me to judge of the expediency of getting one, and thus oblige one of the patrons of your valuable paper. SMITH GIBBS. *Catauba Co., N. C.*

GRAPE VINES.—If you will inform me through the columns of the Cultivator, when is the best time to remove a grape vine, you will oblige. C. D. GRAY. *Castle Creek, N. Y.* [After the middle of autumn, or early in spring.]

R. W. J.—Bethlehem, Pa. We can send you the vol. of Transactions referred to, post-paid, for \$1.30.

WATER RAMS AGAIN.—Some one asked (the 18th of June last) in the Country Gentleman, for the experience of any one that had tried the Water Ram. I had one put in operation the 19th of October, 1853. It has worked perfectly ever since without any expense whatever. Instead of its being "a nuisance," as A. L. E. of Philadelphia says, in the Country Gentleman of Sept. 10th, we think it a very great luxury to have a stream of fresh cool water flowing in the kitchen constantly. The Water Ram is the most labor-saving thing we have on the farm. W. J. DAVISON. *Chelsea, Mich.*

ONIONS.—Where can I get information on the culture of the onion—I mean on an extensive scale? Cannot some of your subscribers furnish us with an article on the subject? M. D. B. *Vincennes, Ind.*

Proceedings of the Fruit-Growers Convention of Western New-York.—Silas Holman, of Bolton, Mass., is informed that this Society has as yet published but one volume of its proceedings, and it may be sometime yet before another is issued.

PLANTING PEACH STONES.—Please inform me how I am to plant peach stones successfully. T. R. M. *St. Monique, C. E.* [Subject them to freezing and thawing for one winter to loosen the shell, then crack them early in spring, and plant the kernel about two inches deep.]

DESTROYING BLACKBERRY BUSHES.—Please inform a subscriber through the Co. Gentleman, the best and cheapest method of destroying bushes—black and raspberries. A. E. W. *Rushford.* [Mow them with a stiff scythe a little after midsummer. If the ground can be tilled sow buckwheat; or what is better, corn in thick drills for fodder, at the rate of three bushels per acre, as this crop, sown late in spring, is very efficient in smothering weeds, in connection with a little horse cultivation.]

POND MUD.—I wish to inquire the best mode of managing pond muck, as I have a quantity which I wish to haul from the pond this fall, and apply it next season. Is lime good, and if so, how much per load? A. A. M. *South Wilbraham, Mass.* [Use it, by all means, if practicable, as a component part of compost—the muck may be applied in alternate layers, a few inches thick, each. If plenty of yard or sta-

ble manure can be had, it may be half and half—if scarcer, one quarter manure will do. The dryer the muck, the better, as it will absorb more of the liquids; but if quite wet when used, it will be worthless as an absorbent. A small quantity of lime may be added at each layer, say one fiftieth.]

USE OF LIME.—I find in the September No. of the Cultivator an article in reference to Mr. Johnston's mode of farming, and I find lime to be a great source of Mr. Johnston's "luck." Being a young hand at the farming business, will Mr. JOHNSTON be so kind as to inform me how lime and salt are to be applied to wheat. Whether before or after sowing the crop. W. E. NEAL. *Charleston Home, near Maysville, Ky., Sept. 8.*

DESTROYING PLANTAIN.—I wish you would tell us in your Co. Gent., how to kill *Plantain*. It bothers me much. C. G. S. *Worcester Co., Mass.* [Some remove it clean from the ground and bury it in holes or trenches—others, with perhaps more economy, remove it wholly and feed pigs upon it. Small fragments easily take root, and it is better to draw it up at the root with the fingers, than to cut it up with the hoe. Persevering labor soon accomplishes the desired object.]

PERPETUAL CLIMBING ROSE.—Can you or your readers inform me whether there is a *hardy monthly* (or *perpetual*) climbing rose, and if so, what it is and where it can be had? LAURA. *Marshall, Ill.* [We know of no hardy climbing rose, that is strictly a perpetual one. There are some that bloom *occasionally*, as for example, the Perpetual Pink, (prairie,) but it does not continue blooming, and should not be called perpetual.]

PATENT OFFICE REPORT.—Could you inform me through the columns of the Co. Gent., where I can procure a Patent Office Report for 1857, and what may be the price of the above? By so doing you will confer a favor on F. M. [The Patent Office Report for 1857 will not be published until about this time next year. The Report for 1856 has but just been issued. You can probably get a copy of it by applying to the member of Congress from your district, or to the Commissioner of Patents. We do not know that they are for sale by any one.]

SALT AND LIME ON WHEAT.—In answer to W. E. Neal, I would say, I apply the lime immediately before sowing the wheat. I apply salt to the land either before sowing the wheat or immediately after. I have known some to apply it in the spring, say April, on the wheat, and with good effect. Mr. Neal could sow a barrel (280 lbs.) to an acre as soon as he reads this, and another barrel on another acre in spring, and see which does best, or if either is worth the cost. I have found it do a great good some seasons, and most good when we had but little rain for some time after it was sown. JOHN JOHNSTON.

SUFFOLK PIGS.—In answer to an inquiry for Suffolk pigs in the southwest, I would say that I can supply a few pairs of pure bred, two or three months old, delivered on board of packet at Hannibal in box, at \$25 per pair. My stock I obtained from Boston, and know them to be pure. Any of your correspondents can address me by mail at Palmyra, Mo. W. C. ANDERSON, JR.

BEARDLESS BARLEY.—Will you have the kindness to advise me if you know of such a grain as beardless barley, and if so, what is its relative yield, where can it be had, and at what price? THOS. B. JOHNSON. *Nashville, Tenn.* [Will some of our correspondents please answer.]

WHITE POLAND OATS.—Can you, Messrs. Editors, tell me anything about the White Poland Oats? I planted some in May, and harvested them some time since, but have so far discovered nothing peculiar about them. Is there any peculiarity about them in yield or

nutritive quality? P. A. S. Quincy, Ky. [The distinctive characteristics as described by Allen are, "a thick white husk, awnless chaff, solitary grains, short white kernel, and short stiff straw." It bears early, is prolific, but inclines to shed its seed early.]

Should red top seed be sown when seeding in winter grain, in the fall with timothy, or in the spring with clover? J. M. Schoharie Co. [It may be sown in autumn, if done early enough to get a good footing before winter. Or it may be sown early in spring, and lightly brushed or rolled in.]

CHUFAS OR EARTH ALMONDS.—In your issue of the 10th, A. G. E. informs you that he has the Chufas or Earth Almond under cultivation, and asks, "Do you know aught about it?" During "your pause for a reply," be good enough to take down the testimony of another victim to Mr. H. B. Lum's flash advertisement, quoting from the Patent Office Report of 1855. I procured a package of these famous nuts, and planted them carefully in a choice part of my garden, and at this writing there is an apparent struggle for the mastery between the bed of Earth Almonds and the nut-grass in the ditch at the bottom of the garden. Can it be possible that any person who had raised it or had seen it growing, could be mistaken as to its identity with the notorious nut-grass, or as it is more commonly called, beach-grass? We (the victims) "pause for a reply" from Mr. H. B. Lum. The Atlantic coast from Point Judith to Key West, is filled with it wherever there is sand enough to cover the hateful tubers. Were I called upon to adjudge damages and award a punishment to this Buckeye offender, I would sentence him to dine on Chufas every day for a month, using *Cirsium arvense*, or Canada thistle, for a salad, and then like old Mr. Nebuchadnezzar, be turned out to grass. M. Saugerties. [The censure bestowed should be upon the Patent Office, rather than upon Mr. Lum, who, innocently, as we doubt not, relied upon the Patent Office Report as good authority. If our correspondent will turn to P. O. Report for 1855, p. xvii, he will find a description of the Chufa, and an assurance that it is not identical with the nut-grass.]

FLEAS.—J. E. W. wishes for a recipe to destroy fleas. French slacked lime strewn thickly over the ground will drive them away, no matter how thick they are. G. Newark, N. Y.

Grubs in Apple Trees.

After all that has been said about preventing this worm from destroying orchards, yet not one farmer and tree planter is benefitted. To exterminate them from old trees, where they have been allowed to remain undisturbed for years, or even in younger trees of six to ten inches diameter, would be a work we should not know how to perform successfully. But to save young trees from destruction, is easy enough when the work is commenced with the yearly growth of the tree. The remedy is simple, but efficient. Our method is: When the trees have been set in the orchard one year, we go to each tree about the first of September, and remove the soil from the collar of the tree, till we come to the roots; then with the back of a knife, or an instrument made for the purpose, we scrape the surface of the bark entirely around the tree; and if any insect has begun his work, we find it immediately under the bark and next the sap-wood, from one-eighth to half an inch in length. The bark is the food for it the first year; but if suffered to remain undisturbed another year, it is invariably found to have entered the solid wood, and often to the center of the tree, where it is safe from all attempts to destroy him, except by actual cutting of the tree till he can be reached by either the knife or a wire prepared for the purpose.

We make this annual examination as regularly as we hoe our corn, and the result is successful, and probably the safest and cheapest method of meeting this destructive insect. In an orchard of more than three thousand trees, we believe we have not lost a tree from the grub in three years. ORCHARDIST. Mount Washington Orchards, Sept. 23.

Seedling Peaches.

A. G. PERCEY of Newark, Wayne Co., N. Y., presented us, at the meeting of the Fruit Growers' Society of Western New-York, held recently at Rochester, specimens of a large yellow peach, apparently resembling Crawford's Late, but not so late, and which appears to be a fine variety. The specimens were oval, full, nearly three inches long, (lacking one-tenth of an inch,) of a rich orange yellow, with a tinge of red in the sun. The flesh is fine-grained, and melting—and although they were picked two weeks before maturity, they were of good quality after keeping that length of time. The growth appears to be vigorous, and the leaves have reniform glands.

Turnips and Radishes.

MESSRS. EDITORS—Inform L. H. that he fails in procuring good turnips and radishes on account of impurity of seed, soil and cultivation.

Seeds should be of the first class, that they may not become woody, or run to seed and become pithy. I prefer the English or French seeds of the Radish (*Raphanus sativus*) family, to those of this country, as they are matured with care. For early sowing, the round shaped or olive shaped is preferable to the spindle-rooted. Soil should be finely prepared, either with the finest of horse litter or hen manure, and the soil should be of a light sandy loam, and well rolled after sowing, and the seed sown evenly in drills of 16 inches apart, that they may be cleaned with the hoe or hand cultivator—thinning them out if the plants are too numerous, and that at an early stage of growth—watering every evening if required, to procure them fine, firm, crisp and crystalline.

Frequent sowings of the Yellow Turnip and Summer White, which are fine kinds, withstand the heat from June to the middle of September. Also the White Spanish, or Black Spanish, as most liked, should be sown during the summer months. The seedlings are generally up in a week, and from that time to four weeks they may be drawn.

Turnips require a soil well manured and pulverized—seed sown in drills two feet apart to three feet for some varieties. Seed should be fresh and known from whom obtained, if not raised by self—thinning them out as they advance in growth, until you get them, each at a proper distance, according to their varieties.

Test your seed before sowing, to see how many germinate out of one dozen, and how soon, that the germination of the seed may be hastened by all natural means. J. WHITE. Ogdensburg, N. Y.

Planting Grape Cuttings.

MESSRS. TUCKER & SON—I have this season tried what was with me a new method of planting grape cuttings,—that of planting them horizontally, near the surface of the ground, perhaps half an inch. I am well pleased with the result. They were planted in a shady place, where the sun shone but a short time during the day. Since I planted the cuttings, I found a notice of that method of planting, so I suppose I must give up the claim to the origin of the plan, and give the credit to the Co. Gentleman. H. C. W. Sheldon, Vt.

New-Hampshire State Fair.

The Eighth Annual Fair of the N. H. Ag. Society, was held on the 7th, 8th and 9th of October, at the city of Concord. Several of the departments were not so well represented as has been the case in some previous years. This was particularly the case in respect to fruits and flowers, though there were some very fine samples of apples, pears, peaches, &c. Of garden vegetables there was a good display, as also of pumpkins, squashes and melons of huge dimensions. Products of the dairy in fair quantity and of first-rate quality. Very fine specimens of corn and potatoes—one man exhibiting 21 varieties of corn and 20 of potatoes, of his own raising. Winter wheat by several competitors. A number of samples of very fine maple and Chinese cane syrup, and maple sugar that in appearance equalled the best "coffee crushed."

Of cattle there were exhibited pure bloods of the Durham, Devon, Ayrshire, Hereford, Alderney, Hungarian, and the so-called natives. Fifteen years ago none others than the last named would have been exhibited at our fairs. Horses of the 2.40 breed were there in strong force, as also various other descriptions of the same genus. A cream-colored mare 12 years of age, and her twin colts by her sides, attracted the notice of thousands of persons; the colts were several months old, nearly the color of the dam. The colts did not so closely resemble each other as did a splendid pair of three-year-old twin steers, owned by Mr. Jenness of Pittsfield. Sheep in great numbers were in the pens—South Downs and Oxfordshires, French and Spanish Merinos, Saxones, Big-tails from Cape of Good Hope, and natives, fat and lean, of various crosses and grades. Swine of various breeds and ages; in numbers, a little short of one hundred were on hand.

But I must not go into particulars respecting many of the other departments of the exhibition, for there have been other fairs besides ours, that you must notice in your paper. But a few words in respect to some new farm implements. There were several hay cutters—one or two new patterns, cheap and efficient, and not complicated or liable to get out of repair. A model of G. D. Harris' Stump Machine, and Portable Press for pressing hay, cotton, hops, &c., which attracted much notice. "Calvert's Improved Common-sense Bee-hive" was thronged inside with honey and bees, and on the outer side with "lads and lasses."

Manny's mowing machine, and R. L. Allen's do, were on hand, and to gratify hundreds of farmers that had never seen one in operation, the agents very cheerfully submitted them to a trial. A level field, containing a plot of about three-fourths of an acre, having upon it a fair growth of second crop of clover and couch or phin grass, was selected for operating the machines; some portions of the grass were very rank, and badly lodged and matted. The work performed by Allen's was much less perfect than that performed by Manny's. How the machines would have competed in other kinds of grasses, we had no means of judging.

But the great attraction for the farmers was Rufus Nutting's "Power or hand grain, grass and garden seed cleaner and separator." It did up the cleaning and separating of different seeds "like a thing of life." Mr. N. "tells his own story" in the Co. Gent. of 1st Oct. His statements are not overdrawn. Most farmers have tolerable winnowing mills, and would be unwilling to throw them aside and pay some \$20 for a new one; but we think it would be a matter of profit for several farmers in the same neighborhood, to club together and purchase one for the express purpose of preparing grain and seeds for sowing. The shrivelled and small grains of wheat are readily separated from the large, plump kernels, and these are entirely clean-

ed from all foul seeds, &c. None have yet been manufactured for sale, but Mr. N. thought they could be afforded at from \$15 to \$25.

The weather during the fair was unexceptionable, the attendance large, and we saw no rowdyism, quarreling, or drunkenness. A fine balloon ascension concluded the show. L. B. Warner, N. H.

Night-soil—its Value and Preparation for Use.

Of all animal excrements, the human faeces, or night-soil, is the most valuable as a fertilizer, when we take in view its quick and permanent action on the soil, and the convenience with which it can be procured and prepared for use by all cultivators. This country being comparatively new, there has been less necessity for that economical system of saving everything of a fertilizing nature, which has been practiced for years where the population is dense and the supply of tillable land is limited; hence we can perceive the reason of the almost wanton neglect in these matters, which has characterized us as a shiftless, unsettled nation of farmers, wearing out our farms and leaving them for the vast plains of the fertile west. This system of culture has been the great stumbling block on which all improvement in agriculture has been sacrificed, and so long as it continues our farmers will never rise to that proud position which is their natural birthright, and which in this of all countries would be granted them.

Our farmers have been within the last few years compelled to pay very exorbitant prices for foreign manures, which have been imported and speculated on more to the advantage of the importers and salesmen, than to that of the purchasers, who are proverbially men of less prudence in financial matters than those of whom they purchase, who are often perfectly unscrupulous in regard to the article sold, provided they can get it off their hands and make a handsome profit. There is perhaps no business in which more has been realized, than in this system of humbugery which has of late become so well known by the open, barefaced manner in which it has been practiced, and the miserable imitations which have in some cases been palmed off on the unsuspecting.

Night-soil contains all the concentrated strength and quick fertilizing qualities claimed for these foreign substances, and has the advantage of more durability, and is not impoverishing to the soil after its effects have been dissipated; the chief and only objection which we have ever heard urged against its use, is its unpleasant odor, which can easily be prevented, and without any decrease to its merits as a fertilizer, by the use of gypsum (sulphate of lime) or charcoal, either of which if thrown into the vaults regularly every few days, will prevent the escape of the volatile gases, by absorption, and consequently leave no disagreeable smell. Many persons use lime as an absorbent, thinking it valuable as it dissipates the odor; but this is a ruinous plan, for its action decomposes and expels all the ammoniacal salts, and leaves only the phosphates. In China and Flanders probably more attention is paid to the economical preservation of this manure than in any other countries, and the Flemish value the excrements of a single adult to be worth twenty five dollars. The Chinese make night-soil quite an article of traffic, which is protected by the government, who provide laws prohibiting that any such excrements should be thrown away; they are saved with the most scrupulous nicety, and regular places of deposit are made at corners of the streets and other convenient places, where persons are always in attendance to apply absorbents and mix the new deposits with water to prevent the escape of am-

monia—consequently the nuisance of smell is avoided. It is also made into cakes by these ingenious people, which are mixed with marl and then burnt to hardness in the sun; they are afterwards pounded into a powder before application to the land, but we should judge by this method the escape of many of the volatile gases would be inevitable, causing a decrease in the quality of the fertilizer.

In Flemish husbandry, the liquid manure system is used with greater advantage than in any other country, and in fact we are told that it has almost superseded all other systems of manuring. We are not prepared to state what amount of liquid manure should be applied to an acre, but this will of course depend upon the strength of the manure and the state of the land. We should judge it better to apply it in small portions at first, as too great an application would prove disastrous, causing the plants to grow too much to straw, and in some cases the crop might be entirely destroyed.

In England, within a few years, the saving and preparation of night soil for use has become a very important branch of the economy of agriculture, and we believe the plan has been generally adopted to use it in liquid form. It is said to be more efficient, applied in this way to the land by means of a liquid manure cart, than when prepared in a powder by absorbents, or dried in the sun after the Chinese fashion. We do not doubt that where sufficient quantities can be procured, the liquid system will prove more advantageous than any other, but it can hardly be adopted as a general practice on small farms in this country, without the liquid portions of the other animal excrements are drained off into a tank and used in conjunction with the night-soil, which might tend to the better preservation of all the valuable liquid excrements on the farm.

The method of preparing night-soil in France, is more destructive to its virtues than that in any of the countries which we have mentioned; the excrements are placed in open casks at Montfaucon, where they remain until they have evaporated many of their valuable gases, and the liquid portions being drained off, it causes a certain dryness to ensue, after which the remainder is taken out in the form of a thick paste and spread on an open floor prepared for that purpose. It is then exposed to the air, and occasionally turned and separated to facilitate its more ready change into a dry brown powder, which is called *poudrette*; by this preparation the night-soil loses all its liquid elements, which contain by far the most intrinsic merits, as they cause the evaporation of more than half the nitrogen and ammonia. After the expulsion of the gases, the residue consists principally of phosphate of lime and phosphate and lactate of ammonia, with small quantities of urate of magnesia and fatty matter. Several attempts have been made in this country to manufacture night-soil into a merchantable article, without diminishing its merits as a manure; these have been partially, if not entirely successful, and the Lodi Co., of New-York, are now making it into *poudrette*, which they claim to be of superior quality; we have seen specimens, and have used it with good results on Indian corn, but are unable to state its value when used indiscriminately on all kinds of crops; it is a convenient manure, and contains no disagreeable smell.

We should advise all farmers, gardeners, and others, interested in obtaining this valuable manure without loss and in its most desirable form, to have good watertight and capacious vaults made under their privies, with convenient outside openings, which can be easily removed; when this is once done, the after task is easily consummated, and the application of the absorbents already referred to, will prevent any unpleasant smell; the mass can then be removed with little difficulty, as it will be in a liquid form. We have usually taken from some convenient part of the farm or woods, a few cart-loads of loam, mixed up with leaves, saw-dust, or any similar rubbish, and placed

them in a round conical heap, as compact as possible; we then flatten or scoop out the top, like the crater of a volcano, and pour in the liquid night-soil. Loam from the sides must then be filled in until the liquid is consolidated. This process can be repeated until the whole heap is well impregnated with night-soil, when it should be smoothed up to its conical form, leaving the sides in good order to shed rain, or it would be still better to have the heap covered with a cheap roof. We do not mean to assert that this is the most saving and efficient method which can be used, but we advise it as a cheap and convenient one for trial by those who have so long neglected the preparation and use of this valuable fertilizer.

We deem it unnecessary to add any further proofs of the value of this manure, when used with discrimination; that point we started with as a settled fact, and the only reason to be urged now against its more universal use in this country, is the natural aversion and disgust to it which seems to be so firmly settled in the minds of all. There is a feeling of disgrace attached to its manufacture and use, which may be partly owing to the supposition that it attains whatever is manured with it—giving rather unpleasant information in regard to the early history of the vegetable; this we do not doubt is entirely an error; it is at least so far as our own limited experience goes, and we have used it in most all ways. One remarkable circumstance is, that those countries in which it has been so long esteemed, have always been justly celebrated for the extreme cleanliness of their inhabitants. Flanders and Alsace are a proof of this fact. G. T. H.

Sugar Cane Mills.

MESSRS. EDITORS—Seeing an article in your valuable paper from the pen of a correspondent, making inquiries for some mill to extract the juice of the "Chinese Sugar Cane," I thought I would describe something which I saw at the extensive manufactory of Messrs. Nourse, Mason & Co., at Worcester, Mass., for that purpose.

In passing through their large store-houses, I saw a machine stenciled "Cane Crusher," and upon making inquiries, I learned the following facts concerning it:

The machine which now engaged my attention was for hand power, the wood-work of which was like a hay or stalk cutter, and the crushing part consisted of three simple rollers. There is no *press*, and no pressing is needed; it simply crushes the cane, and the juice passes off into a tub, or whatever is placed under the machine to receive it. It takes up no more room than a medium sized hay cutter, say two feet by four. Nourse, Mason & Co., sell this size for \$20. I was shown another "Crusher" for power, built in a similar manner, but of great strength and power. This machine, I should judge, occupies a space of about six feet long by three wide, and is built in a very substantial manner.

I subsequently saw the small hand machine in operation, and it worked to my entire satisfaction, extracting the juice in a thorough, neat and skillful manner. The large machine for power costs \$60. Cultivators of this plant would do well to inquire of this mill before crushing their cane. J. H. REED. Worcester, Mass.

HOWARD PREMIUM FOR THE BEST WHEAT CROP.—Mr. H. B. HOWARD, manufacturer of Manny's Combined Reaper and Mower at Louisville, has offered, through the Kentucky State Ag. Society, one of these machines, with Wood's improvement, as a premium for the best 25 acres of wheat grown by any farmer in that State, and a like premium for the same purpose to the farmers of Indiana, to be awarded by their State Ag. Society.

Notes for the Month.

PATENT OFFICE REPORT FOR 1856.—We are indebted to Hon. ASBURY DICKENS, Secretary U. S. Senate, for a complete set of the Patent Office Report for 1856, consisting of four volumes—one vol. on Agriculture and three on Mechanics—and to Hon. J. HOLT, Commissioner of the Patent Office, for the vol. on Agriculture. These volumes are got up in better style than any heretofore issued.

The volume on Agriculture is illustrated by colored prints of a pair of Arden Horses, a South Down Sheep, Peabody's Seedling Strawberry, and a map showing the Isothermal Lines in North America. Beside this, there are 42 pages of engravings on wood, very handsomely executed and printed, illustrating a paper on the "Quadrupeds of Illinois, injurious and beneficial to the farmer, by ROBERT KENNICOTT," and several other cuts. The volume contains papers from D. J. Browne, H. F. French, Simon Brown, John J. Thomas, Dr. Jackson, W. C. Dennis, Joseph Henry, and others, and is, we judge from a hasty glance at its pages, an improvement on the previous Reports.

Two of the three vols. on Mechanics are occupied with lists of expired patents during the year 1856, and lists of patents issued during the same time, with descriptions of the claims of the patentees. The third volume of 554 pages, is occupied solely with illustrations of these patents.

PRINCE ALBERT POTATOES.—I this day forward you a sample of Prince Albert Potatoes, grown on the farm of J. A. Horton, Esq., by me, on the one-eye system—(see Co. Gent. vol. 9, pp. 394 and 411). Our crop is, I think, going to be very fine. We have no disease in our Prince Alberts, and I have dug about 60 bushels of them.

I send you a stem of Jenny Lind Potatoe, with a white one attached not at all resembling the Jenny Lind; you will see it has not any of the characters of that potato. The men said that they had seen several in the same way. I thought it had been another sort of potato, but noticing it attached to the stem with a Jenny Lind, I saved it. Whether it will cook as a Jenny Lind or not, I am unable to say. I shall try it if I should find another. **GERALD HOWATT.** *Newton, N. J., Sept. 21, 1857.*

The Prince Alberts were certainly as fine a lot of potatoes as could be desired—measuring from four to eight inches in longest diameter, and from 2 to 2½ in thickness,—and when cooked, as white and mealy as possible. If their size and quality are in any measure owing to the "one-eye system" of growing, they certainly speak well in its favor. We were glad to receive them, moreover, because we had never before chanced to see this variety, which appears to us must be a profitable one for cultivation. Mr. HOWATT will please accept our thanks.

Mr. T. C. WHITESIDE of Washington Co., presents us samples of a very pleasant, mildly acid, and juicy apple, which he calls the "Argyle." It is of fair size, and said to be a good bearer.

DELAWARE GRAPE.—I send you to-day by Express, a sample of the Delaware Grape from the vine of which I wrote you a description. (See Co. Gent. p. 174.) The fruit matured more rapidly than I expected, when I wrote you, some bunches being ripe a week ago. There are yet a few growing in the shade, not fully ripe. The bunches I send you, are a fair average of the whole: not the largest, but apparently, well ripened. I think, in usual seasons, they will ripen in this latitude, (40°) from the 1st to the 5th of September. **GEO. W. CAMPBELL.** *Delaware, O., Sept. 18, 1857.* [With the above we received two beautiful

clusters, the finest samples of this variety we have yet seen. They arrived in perfect condition for eating. As our readers are aware, neither the bunch nor the berry are large size, but they are compact, the seed small, the skin thin, and without any acidity or astringency of flavor.]

TOWN FAIR, WILMINGTON, VT.—The Vermont Phoenix furnishes us an account of this Fair, which was held on the 22d Sept. The Society owns its show grounds, which are properly fenced, and are provided with a Floral Hall for the exhibition of household goods, &c., and the necessary pens for stock, which on this occasion were well filled, there being on the ground 140 yoke of oxen and steers. "The exhibition," says the account, "in every department was creditable, but in neat stock it excelled that of any county or State Fair we have ever attended." For a number of years past, it is said that the cattle of this town have maintained a decided superiority over those of every other town in the state, and our correspondent, Mr. C. T. ALVORD, gives a very interesting history of the means by which this superiority has been attained. The plan pursued, and which has proved so successful, is the one we have often recommended for twenty years past, to wit, the introduction of well-bred bulls. A Long Horn bull was first introduced about twenty-five years ago—since then a number of Short-Horns, and one Hereford bull, have been used, and to these the great improvement which has taken place is attributed.

A testimonial was to be presented to Mr. Mechi on the 22d ult., "from British agriculturists, expressive of their sense of his zealous and spirited exertions for the improvement of Agriculture, and of his liberal hospitality at the Tiptree annual gatherings. There is an opportunity for wealthy Americans to deserve well of their country, by emulating the example of the present sheriff of London, in substance, if not in detail. In default of "Experimental farms" and "Model farms," under State or associated control, what private individual will be first to make use of every improved process, implement, breed of animals, mode of building and general management of his farm, so as to render the whole practically the most economical, systematic, and profitable—and then invite public examination of the operation, and an annual scrutiny of its results?"

REBECCA GRAPE.—We are indebted to Mr. WM. BROCKSBANK of Hudson, for samples of this very superior grape. We think it richly deserves all the commendation it has received.

STRAWBERRY POTATOES.—Mr. G. W. DURANT of Rensselaerville, will accept our thanks for a basket of his Strawberry Potatoes, which we found to be of good quality, either for baking or boiling.

ILLUSTRATED ANNUAL REGISTER.—A correspondent in Illinois says—"Although I was somewhat prepared for much that your Register contains, I did not expect to find it so replete and finished a little gem. In every particular, I take it to be a model, and as much superior to all of its kind, as the Country Gentleman is to all our weekly agricultural papers."

THE ILLINOIS STATE FAIR.—We have room but for a brief note in relation to this show which was held last week at Peoria. There were shown upwards of a hundred head of Short Horns, a fine display of North Devons, and perhaps the best exhibition of Horses ever made in the State. The Durhams included several animals of the late importation, and must have been a beautiful collection. Among exhibitors of Devons we notice the name of Col. H. Capron, as one of the largest, also that of C. D. Bent, formerly of this State and now of Iowa. We have received no accounts as yet of the other departments of the show. The weather on Monday (Sept. 21) was unfavorable, a cold, drizzling rain

much impeding the arrangement of the grounds and the enjoyment of spectators. At the time of going to press, we have no advices later than Monday eve.

THE CROPS OF 1856.—The report issued from the U. S. Patent-office, states the value of the leading crops of the country for 1856 as follows:

Indian Corn.....	\$360,000,000
Wheat.....	247,500,000
Hay and Fodder.....	160,000,000
Pasturage.....	143,000,000
Cotton.....	136,000,000
Oats.....	68,000,000
Garden Products.....	50,000,000
Potatoes.....	41,250,000
Sugar.....	35,000,000
Orchard Products.....	25,500,000
Total.....	\$1,265,250,000

CORN HUSKER.—The Lockport Daily Advertiser states that Mr. E. S. HOLMES of that place, has perfected a machine for husking corn. It is operated upon by a crank, or may be belted to a convenient power. The editor says—"We saw it in operation a few days ago, and it worked to a charm, taking the husk clean from the corn, and cutting off the ear from the stalk. The farmers will be glad, we know, to obtain a cheap means of lessening a labor which must necessarily take months to do by hand, and be done in a cold barn. The machine does its work effectually, and as fast as a man can feed in the ears. It will be exhibited at the State Fair in Buffalo. Hr. H. obtained a patent for the husker in February last, and this is the first perfect one ever made. We congratulate him and the farmers generally upon his inventive genius."

PORTABLE STEAM ENGINE MANUFACTORY.—It will be seen by reference to the advertisement of Messrs. A. N. Wood & Co., on the last page of this paper, that they have removed their steam engine manufactory from Eaton to UTICA, where they will possess much greater facilities for manufacturing and shipping their articles.

CANADA CATTLE.—Notwithstanding the drawbacks of climate, &c., we manage to breed some pretty good cattle, principally Durham grades, with some Devons. A Stukeley farmer sold a pair of three-fourths Durham oxen, six years old, and *white*, for \$300. They were driven to Montreal market.

R. A. Ellis, Esq., of this place had a Durham grade cow that produced 12½ lbs. butter the second week after, she calved. The trial commenced on the 15th April, and the cow was fed on four quarts ground oats in addition to hay. She is a superior breeder as well as milker—her stock is large and well made.

I have recently purchased the Durham bull "Emperor," bred by R. N. Watts, Esq., the President of the Lower Canada Board of Agriculture. His pedigree is registered in the third vol of the American Herd Book. We have now in this county, 2 Durham, 2 Devon, 2 Ayrshire, and 1 Hereford bulls, all thorough-bred—besides a number of high grades, principally Durhams. G. C. R.

TIOGA Co. FAIR.—I have returned in time for our Tioga County Fair, which is just ended. The weather was very unfavorable, but our new show ground was filled beyond all expectation. The cattle were *all* from the grass-field; probably there was not an animal on the ground that had been fed a bushel of meal; nor did I discover a *comb* or *brush* in either of the cattle stalls. They were shown as all breeding cattle should be shown, in good breeding order. Every man was anxious to have his stock brought before the committee, and the true spirit of competition was manifest in almost every exhibitor. All seemed to express a desire to obtain the first prize, but those disappointed are anxious for another trial, and are not daunted by this defeat. I think every man in the cattle class showed

on an honest principle; not an animal was forced out of its natural and *breeding condition*.

There were several pairs of carriage and other horses entered, which did much credit to the county. The track was a good one to show them, and each class performed the duty required of them to the satisfaction of the judges and managers of the fair. Mr. Harstainer exhibited ten fat cattle and twenty fat sheep, that were of excellent quality.

The sheep and pigs were quite a credit to the show. The vegetables were far beyond those shown at the National Fair at Louisville, or the State Fair of Ohio, at Cincinnati, and I think were equal to any vegetable show I have seen for a long time. The show of flowers and fruit was small, but displayed much taste in their arrangement.

The plowing match was a spirited one; although the rain came down heavily, the plowmen stuck to their work like men, each with an eager desire to win. Four teams started, each of them receiving a prize.

There was a patent hog-pen exhibited by Mr. Brower. Beautiful carriages, and substantial farm-wagons, by Clarke & Perry of Owego, that did much credit to their builders.

All passed off in perfect harmony and good feeling, and hoping for better weather for the next year's show. WM. H. SOTHAM. Owego, Oct. 2.

THE ORWELL (VT) FARMER'S CLUB held their third Annual Fair, Sept 30. Entries 310. Twenty-one sets of judges to as many divisions of the entries, who awarded 180 premiums for stock, mechanical work, farm produce, plain and ornamental domestic manufactures, drawings and paintings, that would have done honor to any county fair, and far in advance of some that are witnessed every year. Our annual town fairs are our best holiday days in the year. SPECTATOR.

USELESSNESS OF SALT FOR GRUBS, WORMS, &c.—We have frequently cautioned our readers against being led astray by the fanciful recommendations of those who advise the application of three, four, and even six bushels of salt to an acre, for the destruction of grubs, worms, weeds, &c. A correspondent of the N. E. Farmer, in a recent communication, states that he had a neighbor who had great faith in what had been said by some, of the virtues of salt, and that he had put a bushel and a half it into a not very large onion bed last fall, hoping to kill the maggot. This summer, however, they have almost entirely swept his bed. This fact may serve to corroborate the statements which we have made in former years, to the effect that some grubs will live, not merely in a soil saturated with a solution of salt, but even in salt itself; and that, at all events, they cannot be destroyed by any quantity of salt applied to the soil which would not at the same time destroy all vegetation.

PRODUCTIVE GRAPE VINE.—Among my grape-vines I have one which I have cultivated more for a shade than for fruit, yet it is a good bearer. Last year I made from it twenty gallons of wine, and sold and gave away more than five bushels of grapes. It covers a trellis ten feet high, eighteen feet wide, and over sixty in length. The body, near the ground, is 4½ inches in diameter. O. H. W.

HERKIMER Co. FAIR.—The 15th Annual Fair of the Herkimer Co. Ag. Society was held at Ilion on the first and second inst. The clouds commenced dripping early in the morning, and did not cease until 5 P. M., of the last day. A more disagreeable time we never before realised—mud without measure or control; wet clothes, wet spirits, and wet everything. Fortunately the society has a Hall which protected all the fineries. The stock department was better than usual, and of finer quality. Horses were of much better stamp than usual. The Fruit Department was the best ever produced in the county—good in numbers, and every way credita-

ble to our horticulturists. Domestic goods moderate in numbers and good quality.

The receipts amounted to only \$212. Last season over \$1,000 were received, and this about our usual amount. This falling off is wholly attributable to the most unpropitious weather that can be imagined. J. D. INGERSOLL, Sec'y. *Ilion, Oct. 5.*

MR. TAYLOR'S SOUTH DOWNS.—We publish this week a portrait of a South Down buck, selected by JONAS WEBB for Col. L. G. MORRIS, previous to the disposal of his flock last year, when the Colonel transferred his interest in him to Mr. J. C. TAYLOR of Holmdel, N. J., who had laid the foundation for a flock by purchases from Col. Morris, and to which he added eight head at Col. M.'s public sale. These were all from the Webb stock, and most of them the get of Col. M.'s celebrated "Young York." "Frank," whose portrait is given, was selected by Mr. Webb, and imported by Mr. Taylor, for the purpose of being used on the sheep Mr. W. had previously sent to Col. M., and is, we are assured, a very fine animal. Mr. Taylor is said to be a first-rate judge of sheep, and is breeding with great skill, and this flock may safely be resorted to for choice breeding animals.

NEWMAN'S THORNLESS BLACKBERRY.—We invite attention to the advertisement of A. A. BENDEL, Esq., Milton, Ulster Co., N. Y. Mr. B. is sole agent for the sale of Newman's Thornless Blackberry, and those addressing him will be sure to get the genuine article.

MILLET SEED.—I notice in Co. GENT of Sept. 17th, page 192, an analysis of Millet seed, and your opinion that they will make good feed. I have just tried them, mixed with wheat bran, and find they do not digest, but pass through whole. I do not think them, for this reason, good food. B. J. T. Pelham, Grundy Co., Tenn. [Did our correspondent overlook the concluding sentence in the article referred to? It particularly states "that those intending to use millet for feeding purposes should have it reduced into meal, the finer ground the better, and when intended for pigs, the meal should be previously boiled or steeped for a time in hot water." We should be pleased to have B. J. T. experiment further with meal made from millet seed, which is the only form in which we supposed it could be used to advantage.]

REBECCA AND DELAWARE GRAPES.—What is the opinion of the *Country Gentleman* as to the relative merits of these two grapes? We have faith in the judgment and integrity of the Messrs. Tucker, and as they have doubtless frequently compared them, we should like to hear their unbiassed opinion. Those who cultivate, and have for sale, a new variety of fruit, of good quality, are naturally the worst judges of its merits. Self-interest generally has an irresistible influence upon the mind; and while in some cases a nurseryman cannot be mistaken in bestowing unmeasured praise upon certain fruits of his own production and little known to the community, this is only the exception to the prevailing prejudice. We therefore need an unprejudiced opinion upon the qualities of these two grapes. We confess our feeling is with the *Rebecca*; but we shall not hesitate to change it upon conviction that we are mistaken.—*Germantown Telegraph.*

Different cultivators have their preferences—both grapes are excellent, delicate, hardy American varieties. We prefer the flavor of the *Rebecca*, but its habit of growth is not equal to the *Delaware*, which is also earlier. We do not, however, think the *Delaware* equal in flavor to the *Diana*. These three are all great acquisitions.

THE CONN. STATE FAIR—at Bridgeport, last week, does not appear to have been so fortunate in weather—after all the main regulator of attendance—as in the general character of the exhibition. In default of anticipated correspondence, we present a few notes from other sources. * * * The show of *Devons* was never

better. Lindley Bros., Meriden, L. S. Hurlbut, Winchester, B. H. Andrews, Waterbury, John T. Andrew, West Cornwall, J. N. Blakeslee and several others of Watertown, Wells Bros., New Britain, were among the more prominent of numerous exhibitors in this class. *Alderneys* were shown by John Giles, Woodstock, G. Thompson, Bridgeport, T. Treadwell, Farmington, and J. N. Blakeslee, Watertown. The *Durhams* on the ground were not of extra quality—this breed, as our readers are aware, is no favorite on the stony hills of Connecticut, where *Devons* are so much better calculated to thrive. Thos. Cowles and several others, however, showed good samples. Thomas Treadwell, Farmington, was an exhibitor of *Ayrshires*. Some very good *Fat Cattle*, and a splendid display of *Working Oxen*, were contributed from different sections of the State. *Horses, Sheep* and *Swine* appear to have been present in good numbers. The show of *Implements* was not very large. The concluding address by DONALD G. MITCHEL is highly spoken of.

THE COUNTRY GENTLEMAN—"One of the ablest and best conducted American newspapers."—*Fifeshire Journal, Cupar, Scotland, Oct. 1.*

SUGGESTION TO POULTRY MEN.—I see by the papers that the American Institute, in New-York, are going to hold a "fat cattle" exhibition at the Crystal Palace, in December next. Would it not be a good idea to propose to the N. Y. State Poultry society to hold their fair at the same time and place, in connection with the "Fat Cattle" show? R. W. P.

WILSON'S ALBANY STRAWBERRY.—NICHOLAS LONGWORTH, the great strawberry grower of Cincinnati, in a letter to the *Southern Cultivator*, says—"I had Wilson's Albany Seedling in bearing the past spring. From its bearing this year it appears to have the rare character of being perfect in both male and female organs, and to bear a full crop of fruit of good size"

THE "VALUE OF MANURES."—Recently chancing to meet with a copy of an English farm Inventory, we noticed in it a striking illustration of the money-value of fertilizing the land, as it is rated and paid for by English farmers. The paper in question was the actual valuation of umpires, made for an out-going tenant, and the sums therein specified were paid to him by his successor, so that it was a matter of real purchase and sale, and not one of mere "estimates" and opinions. Under the head of *The Wheat Crop*, were the following entries:

Paid for half the cultivation and manure expended the previous year on land when in roots, that quantity being assumed as still remaining in the land, 100 acres at £4.....	£400
Paid for value of manure dropped by sheep, on 40 acres of land under clover the previous year,	40
	£440

Here is the sum of nearly twenty-two hundred dollars, paid for the condition of a hundred and forty acres of land, as fertilized by previous operations, above what they would otherwise have been worth. If the simple facts included in the few lines quoted, do not convey their own moral to the reader, he would scarcely be benefitted by all that we could add.

THE PRAIRIE FARMER—This paper, started about seventeen years since at Chicago, by J. S. WRIGHT, Esq., has passed into other hands, and with the change of proprietors a change has been made in the editorship. Mr. C. D. BRAGDON, who has been the principal editor for some years past, has retired, and is succeeded by Mr. JAS. C. MEDILL. DR. KENNICOTT continues as corresponding editor. This paper has done good service in the cause of agricultural improvement, and the new editor and publishers have our best wishes for their success.

Inquiries and Answers.

CUCUMBERS FOR CATTLE—WIND-MILLS—WINTER MELON—ONIONS—BUTTER-WORKER.—By answering the following inquiries in the next Cultivator, you will much oblige one of your subscribers at least.

1st. Are cucumbers worth cultivating for milch cows? They bear remarkably well in this vicinity. I picked several cart-loads this season from a patch two rods square. [We think such a large crop is very unusual and cannot be relied on; and that pumpkins would not only be more productive, but sweeter and more nourishing.]

2d. What will be the cost of a wind-mill of sufficient size to do the work of a small farm, such as churning, sawing wood, thrashing, &c., and which patent is the best? Is not wind the cheapest power we can use here on the prairies, where wood is scarce, and wind is always plenty? [Wind is a very cheap and a universal power, and is very often working or expending itself with a force equal to that of ten thousand horses over every farm. But we are not able, from experience or sufficient observation to say which is the best wind-mill of the many kinds lately invented, nor indeed if any one is well adapted by its simplicity, durability, adaptation, & cheapness, to the ordinary purposes of farming.]

3d. As we do not succeed in raising apples on the prairies, we are desirous of obtaining something as a substitute. In the Patent Office Report for 1854, there is a description of a winter melon, viz., "Winter melon (Melon d'hiver)," from the south of France, with a smooth rind, greenish white, brittle flesh, juicy, and of a delicate flavor. It keeps well as late as the month of February." Where can the seed of this variety be obtained? [We know nothing of the Winter melon—should prefer the pumpkin in some of its best varieties.]

4th. The Onion crop in this vicinity has failed to bottom well this year, running mostly to tops. The superstitious "old grannies" say it is all owing to planting in the full of the moon! What is your opinion? [Our opinion is, first, that the moon at no time has more influence on a bed of onions than a fat cat walking on the adjacent garden fence; and if it had, it would certainly make no difference whether the sun happens to be shining on one side of the moon or the other. Some have claimed that the light of the moon makes the crop grow; but the light of the moon is less than a two hundred-thousandth part of that of the sun—consequently the light of the sun for a single day only, is greater than that of the moon for a thousand years, and at this rate it would require more moonshine than all we have had since the days of Adam, multiplied twenty times, to perfect a single crop of onions—which would perhaps exhaust the patience of most gardeners in waiting for such slow results. The failure our correspondent speaks of must have been from some other causes.]

5th. Will Geo. B. Price inform us through your advertising columns, the price of his new "Butter-Worker," and oblige A MORGAN FARMER. Morgan, Iowa.

How to KEEP ROOTS.—I would be obliged for advice as to the best method of keeping beets and turnips through the winter, for stock. B. S. C.

American Farmers Encyclopedia.

THE MOST COMPREHENSIVE WORK on American Agriculture, and a work of real value.

Twelve hundred pages, seventeen Lithographic Plates, besides other illustrations.

Price \$4. Sent by mail, post-paid, on receipt of price. Catalogue of Agricultural Books sent gratis to all applicants.

A. O. MOORE,
Agricultural Book Publisher,
140 Fulton-st., New-York.

Oct. 22—w2tm1t

10,000 Peach Trees,

TWO YEARS from bud, at \$8 per hundred—\$60 per thousand. Also a general assortment of FRUIT and ORNAMENTAL TREES, at very low prices.

JAMES W. GRAY,
Ball's Pond, Connecticut.

Oct. 15—w3tm1t.

Dadd's Modern Horse Doctor.

AN AMERICAN BOOK FOR AMERICAN FARMERS!!

IT TREATS of the Diseases peculiar to the American climate.

It recommends simple modern remedies instead of dangerous poisons.

It teaches how to keep your horse in good health, and how to cure him if he is lame or sick.

It only costs ONE DOLLAR, and will be sent by mail prepaid.

A valuable catalogue of Agricultural Books will be sent gratis to all who apply.

A. O. MOORE,
Agricultural Book Publisher,
140 Fulton-st., New-York.

Oct. 22—w2tm1t

Regulators for Horse Powers.

THE subscriber has lately invented a regulator, which controls the motion of a railway horse-power as a common governor does a steam engine, preventing any undue speed when the work is stopped or the belt flies off, and renders a horse power a convenient power for all kinds of work of the farmer and mechanic. It is small, simple, and not liable to get out of order, and is bolted to the machine so as to move with it without extra attention. Price of cast-iron \$10—brass \$15. Orders and inquiries addressed to

C. H. TOPPING,
Bridgehampton, L. I.

Oct. 20—w2&m1t*

Webb South Down Sheep for Sale.

SEVERAL BUCKS and a few EWES—price varying from \$50 to \$75 each, delivered on shipboard or railroad, properly boxed, &c., free of charge.

My flock, now consisting of about 60 head, (which will enable me next year to fill many orders,) have all been derived from the above celebrated breeder, from animals imported directly from him, and I have no other blood among them. My sheep have been obtained from Col. L. G. MORRIS of Mt. Fordham, at sundry times at private sale; and at his sale in June, 1856, I secured a great addition. My acquaintance with Mr. Morris' flock, and the shepherd in charge, enabled me to select, previous to the sale, sheep of known and tried breeding qualities, and I succeeded in securing at the sale nearly all I marked, with the exception of one or two ewes, and the celebrated buck "Young York." The disappointment in not getting "Young York," (which at the time was very great, although I had secured a large number of his get,) has been fully made up by the importation of the sheep "Frank," which is illustrated in this paper, and at the same time I got out five very fine ewes. For further information address

J. C. TAYLOR,

Holmdel, Monmouth Co., N. J.

N. B. Col. L. G. MORRIS of Mt. Fordham, N. Y., has very kindly given me the privilege of referring parties to him, as he is well acquainted with my flock at the present time.

Oct 15—w1f

AGENTS WANTED.

EXCELLENT BUSINESS OPENING.

WANTED—A few energetic, industrious Men, to sell Agricultural Books among the Farmers. Very favorable terms will be given. With proper attention, more than \$100 per month, clear profit, above all expenses, can be realized. A rare chance to make money without risk. For particulars, apply immediately to A. O. MOORE, Agricultural Book Publisher, No. 140 Fulton-street, New-York.

Oct. 22—w2tm1t

STOCK FARMS.

THE subscriber having changed his residence, offers for sale his two Farms in Kendall, Kendall County, Illinois.

The Tenant Farm, of about 160 acres, all fenced, has on it a good sized house, good barn, granary, and hog house; a lot of fruit and ornamental trees.

Also his late residence containing about 190 acres—all but 80 acres fenced in. This has a large and convenient house, which cost \$2,500, a good barn and henery enclosed; a good cattle yard; two good wells and a cistern; a valuable orchard, and about 60 varieties of ornamental trees and shrubs; also 14 acres of timber land. The two farms lie adjoining each other, and would make good Stock Farms, and will be sold separately or together, to suit purchasers. Having poor health, and wishing to change my business, I will sell at reasonable prices. For further particulars, address John K. Le Baron, Esq., Specie Grove P. O., Kendall Co., Ill., or the subscriber.

EDWARD S. L. RICHARDSON,

Oct. 15—w3tm1t.

Box 455, Chicago, Ill.

Lawton Blackberry Plants.

Scale of Prices by the Dozen.

A PACKAGE of one dozen.....	\$3
do. two dozen.....	5
do. five dozen.....	10
do. eight dozen.....	15
do. twelve dozen.....	20

The name and direction of the purchasers should be distinctly written, and the money accompany the order.

Address to **WILLIAM LAWTON,**
Oct. 1—w4tm2t. 54 Wall-Street, New-York.

PARSONS & CO.,

FLUSHING, NEAR NEW-YORK.

OFFER FOR SALE an assortment of trees and plants which they have grown for the use of amateurs, and have prepared, by frequent transplanting and other modes, for success in moving.

They are of fine size and symmetrical form, and among them will be found

STANDARD APPLES of fine quality.

STANDARD PEARS, PLUMS and CHERRIES.

PEACHES, APRICOTS and NECTARINES, on Plum stocks, and their own roots.

DWARF PEARS, of fine form, and ready for bearing.

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Oct. 15—w4tm1t

Lawton Blackberry Plants.

FOR Descriptive Circulars and Price—address WM. LAWTON, No. 54 Wall-Street, New-York, or call at his office.

Oct. 1—eow5tm2t.

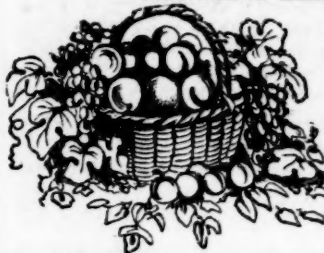
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THE CELEBRATED EXCELSIOR HORSE POWER Thresher and Separator, manufactured by the subscriber, has been awarded the **FIRST PREMIUM** by the United States Agricultural Society at their great exhibition in Louisville, Ky., Sept. 1, 2, 3, 4 and 5, 1857. It was tested in competition with all the best Powers made in this country, in presence of the judges, and was pronounced **THE BEST**, as its name indicates. Those wishing these machines will apply soon, as the demand is large and the supply limited. Get the best, which is always the cheapest.

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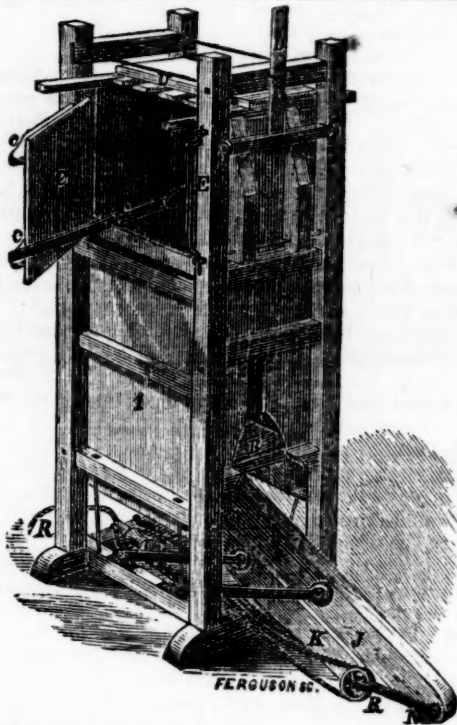
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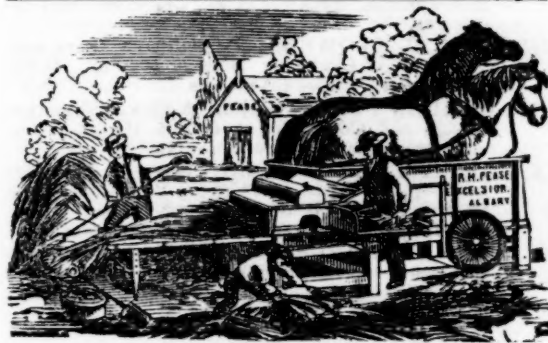
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RICH'D H. PEASE.

CERTIFICATES.

BEDFORD Co. Tenn. Oct. 15, 1856.

We the undersigned hereby certify that we have purchased of the Agent of the Manufacturer, Richard H. Pease of Albany, New-York, his "Excelsior Horse Power and Thresher," and having used them a sufficient length of time to convince us of their utility and durability, feel no hesitancy in saying that in our opinion they are the very best of which we have any knowledge, they having performed to our entire satisfaction. Given under our hand, day and date above.

**GARRET PHILLIPS,
M. L. DISMUKES,
THOS. LIPSCOMB,
WM. A. ALLEN,
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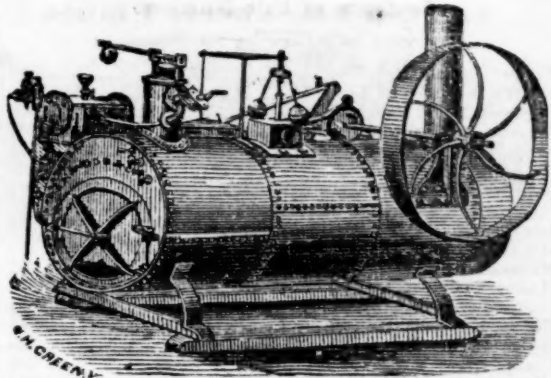
H. D. DAVIDSON.

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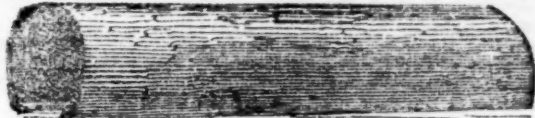
PRICE LIST FOR 1857.

Horse estimate	space oc-	cash price	fly-wheel di-	face of
power weight	cupied		ameter	wheel
2½ 2000 lb.	4 by 5 ft.	\$240	39 in.	5½ in.
3 2200 "	5 by 5 "	290	39 "	5½ "
4 2500 "	7 by 5 "	355	40 "	6 "
6 3600 "	7 by 5 "	550	44 "	7 "
8 4800 "	9 by 6½ "	700	48 "	8 "
10 6000 "	10 by 6½ "	875	60 "	8 "
12 7500 "	14 by 6½ "	1050	72 "	12 "

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4½ " "	18 "
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